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FIRE ACT AUTHORIZATION

HEARING

BEFORE THE

SUBCOMMITTEE ON
SCIENCE, RESEARCH AND TECHNOLOGY

OF THE

COMMITTEE ON
SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

FIRST SESSION

MARCH 21, 1985

[No. 11]

Printed for the use of the
Committee on Science and Technology

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1985

45-946 O

H701-73

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FIRE ACT AUTHORIZATION

THURSDAY, MARCH 21, 1985

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE AND TECHNOLOGY,
SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:10 a.m., in room 2318, Hon. Doug Walgren (chairman of the subcommittee) presiding.

Mr. WALGREN. Let us come to order.

Let me recognize the ranking minority member on the committee for an explanation of conflict that we have in scheduling, but we will be proceeding in any event, so, Mr. Boehlert.

Mr. BOEHLERT. Thank you very much, Mr. Chairman. This is a very important hearing this morning, and I have to explain why there is a notable absence of Members on my side of the aisle.

We have a little thing called the conference going on right now that started at 9—leadership has asked all of us to be there. I would suggest that maybe they're going to be talking about an item called the MX and perhaps the budget. But in any event, it's a command performance so I will have to take leave momentarily and join my colleagues, but we will be back as soon as we can be.

We have all the statements, we will study them thoroughly and we will be very attentive. And I thank you for that opportunity to explain to our panel. I apologize for it, but it's a circumstance beyond my control.

Mr. WALGREN. Thank you, Mr. Boehlert. Today the subcommittee begins its hearings into the authorization, the reauthorization for agencies related to the Federal Fire Prevention and Control Act. This has been an area of some dispute in recent years, as the administration has felt that Federal funds should go elsewhere. The Congress, in general, has been very supportive of the programs that we have seen since the establishment of the Federal Fire Administration and the efforts at the U.S. Fire Academy, and I hope that that will be the same this year.

As you all know, we suffer tremendous losses in the area of fire nationally, personally. The Federal fire effort is a little over 10 years old. It was initiated around the Presidential Commission on Fire in 1974 which led to the report known as "America Burning."

In that report a Federal role was laid out, which would have been a substantial role, a role that called for something in the area of $150 some million of Federal effort each year, if we were to do what was really decided on a nonpartisan and broadly agreed con-

sensus basis what was—what we should do in attempting to prevent the deaths and the losses due to fire.

We have never reached those levels. Just by a rule of thumb, if you were to account for inflation, that $154 million in 1985 effort must be something in the range of $300 million if not more.

We have talked out at somewhere in the range of 25 to $30 million on the Federal level, and find ourselves each year confronted with budgets from the administration, these last several years, that have essentially provided no money for one part or another part of what is a very essential effort.

This year the administration provided no money for the Center for Fire Research in the National Bureau of Standards. At the same time they have submitted proposals that would largely limit the stipend programs at the U.S. Fire Academy which would substantially curtail the outreach of that effort, and there are other restraints that they are recommending.

I hope that the witnesses this morning can give us a fresh and—and it seems we need it on a yearly basis—a fresh impetus to try to appreciate what is happening in this area, where we can do better given the limitations, and someway of appreciating the value of what we do do.

And to that purpose I'd like to call the first panel, and if they would come forward; Richard Bland, professor at the Pennsylvania State University, who was the original chairman of the National Commission on Fire Prevention and Control that met in 1974; Phil Schaenman, the president of TriData Corp., who was a Former Associate Administrator of the U.S. Fire Administration; and Richard Magee, the chairman for the Center for Fire Research Panel of the Board on Assessment of the National Bureau of Standards. Dr. Magee is in—full-time commitment is with the Mechanical Engineering Department of Stevens Institute of Technology, and gentlemen, we welcome you to the committee.

We certainly have—apparently somebody has it requested to take some photographs, and I know from our standpoint that's just fine.

Your full statements will be made part of the record and reproduced as submitted. And so, if you would highlight them and outline them and make the points that you feel deserve to be focused on by those who may not be able to read the full statements, but would be reading the oral transcripts of this hearing, that would be helpful and I think it would focus your points, if you could do that.

So, let me start with Professor Bland and welcome you back to the committee. We appreciate the time that all of you put into giving us a basis on which to act. So if you would proceed, we'd be happy to hear your views.

STATEMENT OF RICHARD E. BLAND, PROFESSOR, PENNSYLVANIA STATE UNIVERSITY STATE COLLEGE, PA; FORMER CHAIRMAN, NATIONAL COMMISSION ON FIRE PREVENTION AND CONTROL

Mr. BLAND. Thank you, Mr. Chairman. In my prepared statement I responded to your committee's request for the objectives of the National Commission on Fire Prevention and Control. In that

statement I hope I expressed what is my continuing concern for our progress toward those goals, and I presented some suggestions for the Congress' consideration.

In this verbal testimony I would ask for your best efforts, Mr. Chairman, in support of the Center for Fire Research at the National Bureau of Standards, and through an example I would hope to reiterate the need for what I will call a visual and respected Federal fire focus.

First, the Center for Fire Research is a unique capability and capacity within our Federal system. The capacity is not duplicated and I do not think it should be. What that Center does can best be done within Government because progress in fire loss management requires technical advice, technical advice from a highly specialized scientific and engineering laboratory, and the advice must be offered without vested interest.

CFR has demonstrated that capacity and most important, it has a corporate memory in fire. These are both very valuable assets. As a user of CFR's engineering reports, I find them responsive to what I call the real time needs and they do meet high professional standards.

The Center for Fire Research should be given budgetary support, be commended for the quality and the quantity of its work and encouraged.

My example of how an authoritative Federal focus for fire could serve a constructive purpose begins with a concern for the retarded citizen. It's an example of what was accomplished early in this decade, but has hiccupped on its way to acceptance.

Recent studies, supported by the Federal and State funding, have shown that everyone, even the severely and profoundly mentally retarded, can grow and develop given a supportive environment. Court orders have been directed toward deinstitutionalization, State and Federal funding has been provided for residential group homes, and there has been a response at the local levels.

Association for Retarded Citizens in Center County, PA, operates two such residences, each having 10 or less retarded persons. I'm a member of the board of directors and our goal is to have our residents experience as near a family environment as practical. They attend public schools, they're taught to care for themselves at the limit of their capabilities, they help each other and they do accomplish productive tasks.

In that environment supportive relationships have been built within the neighborhoods. The atmosphere of the homes is informal and friendly. The responsible adults are in those houses 24 hours a day and specialized professional help is maintained at the highest trainer to client ratio affordable.

The two residences are structurally sound, well cared for, family-type homes, typical of 1920's. We have a concern for fire, and the board continues to make improvements that reflect our understanding of life safety.

Recently, because it was impractical to make a subjective judgment that less than four of our residents were incapable of self preservation, the funding authority has required that an automatic sprinkler system be installed. This is to be a condition for continued certification of the residences. We support the requirement and

assistance has been made available from community block grant funds.

A few years back, the Fire Administration and the Center for Fire Research, along with active industrial participation, developed an automatic sprinkler system specifically for those light fire loads that we find in residences.

The residential objective is to increase time to escape. Automatic extinguishing systems for high value, high risk commercial structures primarily address property conservation. The technical requirements, of course, are significantly different. Residential sprinkler heads respond faster, put water higher on walls, require less water supply and the system is less costly.

The life safety fire sprinkler system was a milestone toward reducing fire loss. Any technology that decreases risk at lower cost is worth our interest.

By now I suspect you're way ahead of me. I have not been able to get governmental approval for installation of a life safety system in those residences. Much as our medieval ancestors searched for the Holy Grail, I search for the authority having jurisdiction. Within a fixed time restriction I must find the authority and show that the system provides no greater risk than the standard system. If I accomplish that, we'll improve life safety, save some community block grant fund and hold the line on housing costs. The alternatives are not attractive, given the intent of the mentally retarded program.

Local fire authorities want the system, State health care authorities admit to the system's performance, but the standard requirement is a condition of a Federal agency. That Federal agency has adopted or recognized NFPA installation standard as a code, but NFPA is not the authority having jurisdiction. A good engineering effort has yet to be transferred; few are practiced.

This is a field example looking up at our fire management system. It demonstrates how the simplistic argument that fire is a local responsibility obscures the fact that the Federal Government is broadly involved in fire loss management. It emphasizes the benefits that could accrue if a stable Federal leadership that transfers experience and knowledge within Government and within the fire community did indeed exist.

It was not the intent of the National Commission on Fire Prevention and Control that the Federal Government assume substantially more responsibility for fire loss management. The attempt was to establish a visible Federal leadership for a cooperative effort over the totality of the fire community. That fire community is broad; it includes architects, architectural engineers, fire protection engineers, insurance underwriters, code enforcement officials, standards organizations, builders, tradesmen, building operators and owners, fire officials, Government fire suppression forces, industries and the public. Success in significant loss reduction rests in bringing them all together.

I make the following suggestions for your consideration. Reaffirm that it is the desire of the Congress to significantly reduce the loss of life and property from destructive fire. Two, agree that where the Federal Government has unique capacities and capabilities, it will organize and participate in a loss reduction program. Three, by

COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515

Testimony of R. E. Bland
March 21, 1985
Chairman, Former National Commission
on Fire Prevention and Control

I have the impression that it is time to return to "the basics."

You asked what did the Commission want to do?

Early in its tenure the Commission agreed that a significant reduction in life and property loss from fire was its objective. That is a clear and constructive response to a demonstrated public need. It was an attainable goal in 1973 and remains attainable today. Given our collective capacity and capability our immediate problem is a failure to organize and exact performance.

In its two years of existence, the Commission immersed itself into the American system of fire loss management. Fire, a critical public safety issue, is by some characterized by a day-to-day individual indifference and a near irrational response when a serious incident occurs in a community. Historically we have burried the dead, cleared the rubble, and failed to put into place actions which would have avoided the loss or decreased its impact. Some argue that the protection of ones own life and property from fire is an individual responsibility; others argue for a governmental responsibility to the point of contending fire protection is a right similar to health care and crime control. Mostly we agonize. History, both here and abroad, shows that societies have adopted a collective responsibility in the forms of regulation and response to an incident. In an industrial society, because of its high population density, concentration and variety of product, and interdependence, the communal responsibility finds justification in both economics and social well being. There is little argument that fire control is an element of public health, safety and welfare and as such is to some degree a governmental responsibility.

The search for a model of the American system shows an inconsistent expression of responsibility by local government and a wide variance at the state level. In contrast, the federal level participates in the widest sense, examples are the provision of active fire suppression services for forests and field crops, the regulation of structural design through minimum standards, a consumer product safety service, and support of research in combustion, toxicity and burn treatment. The position that fire protection is a local responsibility is simplistic to the point of obscuring needs as well as political reality.

an appropriate mechanism delineate those functions the Federal Government will undertake, subject, of course, to participation by the other levels of Government and the private sector.

Fourth and lastly, restructure in a way to institutionalize those functions into a program that's responsive to the needs of the public and a program that is managed efficiently, effectively and with equity.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Bland follows:]

In contrast to the indifference characterization, Americans pay billions of dollars annually to share loss through insurance, donate to and participate in volunteer fire departments, pay taxes for suppression equipment and manpower, provide for building and fire code enforcement and share possessions with fire victims.

There is a demonstrated concern for fire in America. We all recognize the growing list of threats that surround us. Yet fire loss is one area where risk can be managed; without a coordinated management effort the continuing losses are unconscionable.

In its chartering legislation, the Congress asked that the Commission advise how the federal government might act to reduce fire losses through appropriate recommendations. Four functional areas were recommended.

The Commission found that a research and development function was appropriate; that recognized our limited engineering and scientific understanding of fire in the built environment and the effects on people.

Title I of the legislation provided for hard science research through the Center for Fire Research at the U.S. Bureau of Standards. The Commission concurred and recognized the fire related corporate memory within NBS, its long term contributions to the concensus code system, and its existing facilities and professional capability. The suggestion was to actively encourage and participate in that effort.

But there were areas of research outside the Commissions interpretation of the NBS organic charter that needed attention. Examples would be burn treatment and those within behavioral science. We catalogued such efforts and suggested their enhancement. It is the interaction of people with fire that is a particular concern of government.

The Commission found the existing fire data base inadequate. Management of any problem requires problem definition. What was needed was a valid statistical data base upon which intervention strategies could be developed and their results quantitatively evaluated. The operational aspects of such a data system were recognized as intense and difficult. The source of data would be at the incident level and observers would have to be trained. An interesting aspect of fire data is the need for details of fires that did not require the conventional services of fire suppression forces; a "non-fire" is the objective.

The Commission recognized that significant reduction would only occur from a cooperative effort between all level of government and the private sector. A critical function is information transfer; that was to be the assignment to the National Fire Academy. In discussion of the federal involvement, America Burning states:

> "The Academy... has an important function as a conduit of Federal assistance to local communities. Its educational programs could have pronounced effects on fire prevention, fire safety in buildings and the performance of local fire departments. All segments of the field of fire protection, both public and private will benefit..., and all should have a part in its development."

The Commission recognized that progressive leadership would require informed, willing and competent followers. Since an element in the program would be to test and learn, model programs were a preferred method. Program evaluation would be at the local level (incident level) and some consultive and financial support would be necessary. That liaison was to be the function of the Local and State Model Programs. Attainment of the fire loss objective requires that we move from an endless state of analysis and debate to "trying something out."

These four functions that the Commission found as appropriate are the blocks of the proposed organizational chart in America Burning (page 141). They are:

- Research and Development
- Information Systems (Data)
- Academy
- Local and State Model Programs.

What the Commission wanted was to be responsive to its Congressional mandate. It did provide guidance toward a constructive fire loss control program on behalf of the public.

You asked, what did we get?

After deliberation, the Congress provided an organizational form that was responsive through the U.S. Fire Administration. The appointment of Mr. Howard Tipton as the first Administrator brought both skill and experience in local public service management to the office. The initial cadre began programs that remain the major accomplishments of the USFA to date; among them were emphasis on the early warning fire detector, residential sprinkler development, incentives for master planning at the local level, the framework for a responsive data system, a substantive annual fire conference, and a plan for an information assimilation and dissemination system (the Academy).

The Center for Fire Research was established within the NBS. Its contributions remain noteworthy. As a recipient of their reports, I assure you of their engineering value and utility. The CFR is a unique and extremely valuable capability, necessary for the management of the fire problem.

What has happened to USFA in the intervening decade is not clear. My conjecture is that the cohesiveness required of its advocates fractured along lines of their traditional turf. New, sometimes very vocal groups, emerged as authoritative spokesman to negotiate with the Legislature and Executive Branches. The battle for maturity and recognition of the USFA became so intense as to be nonproductive. Compentent members of the staff "saw the handwriting on the wall" or were forced from their positions.

A series of Administrators followed, each dedicated, but having received most of their training and experience within the fire suppression service. The Congress found itself buying, selling, and establishing an academic campus structure for the National Fire Academy; the focus shifted toward specific needs within the fire suppression forces.

I assure this committee that very few of the Commissioners supported "bricks and mortar" as a concept for the academy. In fact, both the majority and minority in the Commission report made clear its concern that "the academy" might emerge dominant in the system. (See America Burning, recommendation 22 on page 168 and the minority report, part 8 and item III-A page 153.)

Over time the USFA has been nearly stripped of the authority and visibility that the Commission saw as essential and it drifted away from its engineering base in CFR. The government reorganization of the USFA into FEMA was a further dilution. A recent pamphlet from FEMA indicated that the Training Division of FEMA administers the National Fire Academy and the U.S. Fire Administration.

Nothing productive can result from faulting anyone or any group. Collectively, we have moved away from a creditable objective toward a narrowness in service. Given that narrowness and a pronounced trend toward reduction of federal government expenditures there is understandable difficulty in justification. With my understanding of the current program within the USFA and the NFA, I find it difficult to argue that the federal level of government has a unique competence or capability in these programs.

The Commission envisioned no "give away" program but a "gutsy" attempt at an integrated and cooperative effort across the spectrum of American capability.

Each year that I appear before the Congress, I fear that my associates and I have again failed to:

- communicate the frequently recurring threat that destructive fire poses to our natural resources, the products of our labors and our individual well-being.
- professionally express the conviction that fire losses can be significantly reduced,
- show that the solution is not in a large additional federal expenditure,
- convey that a federal focus is essential for effectively and efficiently mitigating the losses, and
- convince that the need is for stable institutionalized leadership.

You ask, what needs doing?

1. Reaffirm that it is the desire of Congress to significantly reduce the loss of life and property from destructive fire.
2. Agree that where the federal government has unique capacities and capabilities it will organize and participate in a loss reduction program.
3. By an appropriate mechanism, delineate those functions the federal government will undertake, subject to participation by the other levels of government and the private sector.
4. Restructure in a way to institutionalize those functions into a program that is responsive to the needs of the public and is managed effectively, efficiently, and with equity.

Mr. WALGREN. Thank you very much, Professor Bland, we appreciated that very much. I want to express our admiration for your continued involvement in this area over these number of years and how important a resource you are in view of your role in the original look by the Federal level at fire, and we look forward to continued contact with you in the discharge of this committee's responsibilities.

Let's turn, then, to Mr. Schaenman.

STATEMENT OF PHILIP S. SCHAENMAN, PRESIDENT TRIDATA CORP., ARLINGTON, VA; FORMER ASSOCIATE ADMINISTRATOR, U.S. FIRE ADMINISTRATION

Mr. SCHAENMAN. Thank you. As the committee requested, I will give a brief summary of our studies on how the United States compares to other countries in fire safety, and the implications for improving our programs. These studies were started at the Fire Administration and were continued with the aid of grants from the Tobacco Institute's fire prevention program.

The United States and Canada continue to have the dubious distinction of having the highest fire death rates in the world. This was the case 10 years ago when "America Burning" was written. It is still the case even though the death rate has gone down significantly since the Fire Administration was created. We have improved, but we are still much worse than the rest of the world. The relationship shown in that chart in front of you there you've seen before. It still applies unfortunately.

The situation would be much worse today if it weren't for our advancing fire technology. We make the most extensive use of smoke detectors in the world, and they've saved many lives. We have an increasing number of buildings with sprinkler systems and they work. We also have a superb fire service that's generally well equipped, and they are deployed within shorter distances of the average home than is the case in Europe or Asia.

Then why the big difference between us and other nations? What can we learn from their approaches to fire? The answers are not simple. There are many causes of fires, many ways people live and many successful approaches to the fire problem. There is no one solution. But the glaring gap, where we seem to be way behind the rest of the world, is in public awareness of fire safety.

People in other countries are far more careful than we are when it comes to fire safety. They have the same kinds of fires we do, but far fewer of them. It's tempting to attribute the differences in fire safety awareness among nations to their differences in living conditions or culture, but when you probe beneath the surface this is not so clear.

The Japanese live in wood and paper houses that are huddled together on the narrowest of streets. In Hong Kong, most people live in concrete highrises. In New Zealand, they live in wood frame detached homes. We have double or triple all of their fire death rates.

Sometimes the history of major fires is cited to explain our differences. Virtually every city in Europe and Japan burned down several times in the Middle Ages. But we've had our share of large fires too; New York, Chicago, Boston, and many other U.S. cities

have burned in the last 150 years, but with little residual impact on our psyche other than some humorous references to a cow kicking over a lantern.

Now why have our major fires not led to the same public concern as the great fires of Europe and Japan? The answer is that we do not drive the lessons home.

The overwhelming feature of fire protection in other countries is how much harder they work at fire prevention than we do. The U.S. Fire Administration was given a charter by the Fire Prevention and Control Act to emphasize prevention. It has made an impact even with scant resources. There are now networks of public educators, education materials and public education programs that didn't exist before.

Within the fire service, fire prevention is now more respectable than it used to be, but compared to other nations we still only put a drop in the prevention bucket.

Now let's look at some examples of how Japan practices fire prevention. In schools it is national policy in Japan to teach fire prevention to children in the fourth grade, when they're 10 years old and forming their values. They teach the children that firesetters are bad guys who should be turned in, as well as teaching the basics of fire prevention. They also teach how to extinguish small fires. Many school systems repeat the lessons on a more sophisticated level in junior high.

The Japanese national fire agency encourages schools to follow their policy, and most do, though compliance at the local level is voluntary. In the United States, we don't even know how many school systems teach fire education or what the quality of that education is.

Fire officers in Japan are highly motivated to lead their communities in fire safety. They receive training and prevention as part of their mandatory officer courses. Most of our officers receive no mandatory training; though I might add that New York State has established a mandatory training program starting next week, I believe, and Frank McGarry might comment on that in a later panel. Learning here, for most fire officers today, is done on the job.

The National Fire Academy has good prevention courses, but only a fraction of prevention officers get to attend them today, let alone all officers, and that's both their on-campus courses and the outreach program. Officer training is crucial in setting attitudes about prevention in the fire service and must be encouraged.

Fire departments in Japan send a public relations car to the scene of every working fire. A trained officer, often a woman, tells the crowd that gathers what the cause of the fire was. This PR officer is also the point of contact for the press and the press is encouraged to report the exact cause.

Fire departments in the United States are often hesitant to report the cause of a fire to the press, and they often say it's under investigation because of their concerns with legal liability.

TV and radio stations in Japan broadcast fire prevention spots in prime time. In Osaka there are live radio reports twice a day from fire headquarters. The Japanese Fire Defense Agency produces a 5 minute national TV program twice a week at 10 a.m. and noon.

Fire departments in Japan often visit individual homes on a regular basis. In Kyoto, for example, they try to visit each home every 3 years. One firefighter from each company goes door to door for 2 hours a day using a red motorbike to get around.

The Japanese Fire Prevention Week in the fall was copied from ours, but they've added 2 additional full weeks of fire prevention in the spring.

Now none of these practices are pilot programs. They reach nearly every citizen over and over. Perhaps most important, these prevention programs instill a sense of responsibility in the citizens of Japan. Causing a serious fire there is like causing a serious traffic accident here, and this attitude is reinforced by legal penalties. So it's no wonder that the Japanese have a higher fire safety awareness than we do.

Their fire protection does not cost more than ours; rather, they spend a larger share of their resources on prevention. Instead of having 5 percent of firefighters assigned full-time to prevention, as we do, they have 15 percent. Now, that results in a 10-percent lower effort for suppression, but it's a 200-percent increase for prevention.

While there are problems in transferring programs from one community to another, let alone one nation to another, most of the practices I observed seem transferrable. Ask Commissioner Galante in Chicago; he has already launched an ambitious prevention education program that's been stimulated in part by the Japanese concepts.

There are some conclusions here we can draw for our national fire program. First, the U.S. Fire Administration should continue and increase its leadership in fire prevention, and should encourage stronger local and State fire prevention efforts. This is the single most important action we can take to reduce the international gap in this decade.

The National Fire Academy should be strengthened to get more officers and prevention specialists to attend the Academy prevention courses. Canceling the stipend program, as proposed in the budget, would be going in just the wrong direction, especially for volunteers.

We should also study practices from other nations. They come here and pick our brains and it's high time that we, too, started taking advantage of the world's pool of ideas.

The Center for Research at the National Bureau of Standards needs to be strongly supported to help advance the technology that saves us from our failings in carefulness, and allows us to build a more firesafe environment at tolerable costs. We could do much more to get the public to be careful than we're doing, but we can't get everybody to be careful all the time. Our technology gives us a buffer to be human. The Center's research also can provide the hard facts for advising people on the best strategy for surviving a fire.

The Fire Administration needs more specific information on the public's awareness of fire, how it is developed and the forces that are shaping it. For example, we need to know the extent of fire department public education programs. We need to know the percent of school systems that include fire safety in the curriculum and

whether they're effective. We need to know the role the media's playing in shaping attitudes about fire safety as they have about crime.

The Fire Administration should continue to call upon industry to do its part in fire safety, especially the insurance industry. It reports major financial setbacks recently because of the gap between premiums received and payouts for losses, but has not really begun to use the new fire information available to develop prevention programs that could reduce the losses—their losses. Further, in many countries the insurance industry has adopted a policy of not paying for a building that burns down unless a similar building is rebuilt on the same spot. That is a very powerful disincentive for arson, and we might consider that, too.

We've learned a great deal about the fire problem through the development of the National Fire Incident Reporting System. It provides data for targeting prevention and for other management decisions and needs to remain strong. The national fire data needs to be analyzed and displayed as models for State and local fire agencies, and key findings need to be followed up to find out the why's behind the data. For example, when Pittsburgh and Philadelphia show up high in fire death rates, as they did in our international comparisons of cities, we need to know why. My former data shop has half the budget, one-fifth the people and a larger number of participating cities to serve, and these just aren't adequate resources for the job.

From the positions I've held within and outside the Fire Administration, I believe that it has had a significant impact while operating on a tiny budget as Federal agencies go.

Other countries realize that one of the main reasons for civilization is the mutual defense against threats such as fire. While most of the fight is at the local level, nations as diverse as France and Japan have strong Federal fire organizations that provide leadership, data, research and training. We need the same if we are to be successful as they are in keeping people from suffering the enormous personal and economical losses we have today from fire.

I'd be glad to answer any of your questions on that.

[The prepared statement of Mr. Schaenman follows:]

Statement of Philip S. Schaenman, TriData Corporation
for the House Subcommittee on Science, Research, and Technology
March 21 Hearings on the U.S. Fire Problem

My name is Philip S. Schaenman. I was an Associate Administrator of the U.S. Fire Administration from 1976-1981, and was responsible for the data and technology programs. I am now President of TriData Corporation, which specializes in research on fire protection issues.

As the Committee requested, I will give a brief summary of our studies on how the United States compares to other countries in fire protection, and the implications for improving the U.S. fire program. These studies were started at the Fire Administration, and were continued with the aid of grants from The Tobacco Institute's fire prevention program. Copies of our just published study on the Far East and our earlier report on Europe have been provided to the Committee.[1]

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The United States and Canada continue to have the dubious distinction of having the highest fire death rates and some of the highest building fire rates in the world. This was the case 10 years ago when "America Burning" was written. It is still the case even though the death rate has gone down significantly since the Fire Administration was created. We have improved, but we are still much worse than the rest of the world.

The U.S. fire death rate is 50-200 percent higher than nations in Europe such as Britain, France, and Switzerland, and nations in the Far East such as Japan, Hong Kong, and Australia. We are even higher than most underdeveloped countries, according to World Health Organization data.

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[1] Philip S. Schaenman, International Concepts in Fire Protection -- Ideas from Europe that Could Improve U.S. Fire Safety, TriData Corporation, Arlington, Virginia, December 1982, and Philip S. Schaenman and Edward F. Seits, International Concepts in Fire Protection -- Practices from Japan, Hong Kong, Australia, and New Zealand, TriData Corporation, Arlington, Virginia, February 1985.

The situation would be much worse today if it weren't for our advancing fire technology. We make the most extensive use of smoke detectors in the world, and they have saved many lives. We have an increasing number of buildings with sprinkler systems, and they work. If residential sprinkler systems go into wide use, the impact could be even greater.

We also have a superb fire service that is generally well-equipped, and they are deployed within shorter distances of the average home than is the case in Europe or Asia.

Then why the big difference between us and other nations? What special conditions do they have that we do not? What can we learn from their approaches to fire?

The answers are not simple. There are many causes of fires, many ways people live, and many successful approaches to the fire problem. There is no panacea, no one solution.

But the glaring gap, where we seem to be way behind the rest of the world, is in public awareness of fire safety. I have attached a figure to my testimony which presents this assessment of where we stand on different aspects of fire protection in somewhat more detail.

People in other countries are far more careful than we are when it comes to fire safety. They have much the same kinds of fires we do, but far fewer of them. As you know it is not the few big fires but the very large number of residential fires we have that does us in.

It is tempting to attribute the differences in fire safety awareness among nations to their differences in living conditions or culture. But when you probe beneath the surface, this is not so clear.

The Japanese live in wood and paper houses that are huddled together on the narrowest of streets. In Hong Kong, most people live in concrete highrises, except for several hundred thousand squatters in shacks and people on junks. In New Zealand, they live in wood frame detached homes that are well-separated. In Switzerland, there are sturdy multistory townhouses and wooden chalets. We have double or triple all of their fire death rates.

Sometimes the history of major fires is cited to for explaining our differences. Virtually every city in Europe and Japan burned down repeatedly in the Middle Ages. But we have had our share of large fires, too. In 1835 the largest fire in the English-speaking world since the Middle Ages was not in Europe but in New York City. Few Americans know that, including New Yorkers. Chicago, Boston, San Francisco, Atlanta, and many other U.S. cities have burned in the last 150 years, with little impact on our psyche other than some humorous references to a cow kicking over a lantern. Why have our major fires not led to the same public concern as the great fires of Europe and Japan have produced? Because we do not drive home the lesson.

The overwhelming feature of fire protection in other countries is how much harder they work at fire prevention than we do. The U.S. Fire Administration was given a charter by the Fire Prevention and Control Act to emphasize prevention. It has made an impact even with scant resources. There are new networks of public educators, new education materials, and public education programs such as on smoke detectors and juvenile firesetters that did not exist before or were not widely practiced. Within the fire service, fire prevention is more respectable than it used to be. But compared to other nations we still put only a drop in the prevention bucket at local, state, and federal levels, in schools, in the insurance industry, and overall. I also believe we probably could get better leverage from the money we do spend.

Let's look at some examples of how Japan practices fire prevention.

In schools, it is national policy in Japan to teach fire prevention to children in the 4th grade, when they are 10 years old and forming their values. They teach the children that firesetters are bad guys and should be turned in, as well as teaching the basics of fire prevention. They also teach how to extinguish small fires. Many school systems repeat the lessons on a more sophisticated level in junior high school. The Japanese national fire agency encourages the schools to follow the national policy, and most do, though compliance at the local level is voluntary. (In the U.S. we do not even know how many school systems teach fire education --

whether it is 10 percent or 90 percent -- or what the quality is.)

Fire service officers in Japan are highly motivated to lead their communities in the practice of fire safety. The Japanese officers receive training in prevention as part of their mandatory officer courses. Most of our officers receive no mandatory officer training -- it is mostly on-the-job learning. The National Fire Academy has good prevention courses, but only a fraction of prevention officers, let alone all officers, get to go. Officer training is crucial in setting attitudes about prevention in the fire service, and must be encouraged.

Fire departments in Japan send a public relations car to the scene of every working fire. A trained officer -- often a woman -- tells the crowd that gathers what the cause of the fire was. The PR officer also is the point of contact for the press; and the press is encouraged to report the exact cause. We often train PR people to report the cause as "undetermined," because of an incorrect perception of the legal liability involved in reporting the cause of fires.

Fire departments in Japan go to great lengths to assist the media when they are reporting fires. Large departments provide the press with phones in their dispatch centers. Tokyo flies over fires with a helicopter that broadcasts live TV.

TV and radio stations in Japan broadcast fire prevention spots in prime time. In Osaka there are live radio reports twice a day from fire headquarters. The Japanese Fire Defense Agency -- their USFA -- produces a five minute national TV fire prevention program twice a week at 10 a.m. and noon.

Fire departments in Japan often visit individual homes on a regular cycle. In Kyoto, for instance, they try to visit each home once every three years. Fire stations there have red motorbikes which a firefighter from each company uses to go door to door for two hours every day.

The Japanese Fire Prevention Week in the fall was copied from ours. But they have added two additional full weeks of fire prevention in the spring.

None of these practices are "pilot" or "demonstration" programs. They reach nearly every citizen over and over. Perhaps most importantly, these prevention programs instill a sense of responsibility in the citizens of Japan. Causing a serious fire there is like causing a serious traffic accident here. This attitude is reinforced by legal penalties. It is no wonder the Japanese people have higher fire safety awareness than we do.

And their fire protection does not cost more than ours. Rather, they spend a larger share of their resources on prevention. Not a radical shift, but instead of having 5 percent of firefighters assigned full-time to prevention and 95 percent to suppression, as we do, they have 15 percent on prevention and 85 percent assigned to suppression. That means a 10 percent lower effort for suppression, but a 200 percent increase in the effort for prevention. And suppression is not hurt much because all of the prevention force can assist in suppression when necessary.

While there are problems in transferring programs from one community to another let alone one nation to another, most of the practices I observed seem transferable. Ask Commissioner Galante in Chicago; he has already launched an ambitious prevention education program that has been stimulated in part by some of the Japanese concepts.

There are some conclusions here we can draw for our national fire program.

1) First, the U.S. Fire Administration should continue, and increase, its leadership in fire prevention to encourage stronger local and state prevention efforts. This is the single most important action we can recommend to reduce the international gap in this decade.

2) The National Fire Academy should be strengthened to get more officers and prevention specialists to attend the Academy prevention courses. Cancelling the stipend program, as has been suggested in the proposed budget, would be going in just the wrong direction, especially for volunteers. The Fire Academy should include in its program the study of practices from other na-

tions. They come here and pick our brains. In Kyoto, Auckland, and Hong Kong we found fire protection practices that originated in the United States. It is high time that we, too, started taking advantage of the world's pool of ideas.

3) The Center for Fire Research needs to be strongly supported to help advance the technology that saves us from our failings in carefulness, and allows us to build a more firesafe environment at tolerable costs. We can do much more to get the public to be more careful, but we cannot get everybody to be careful all of the time. Our technology gives us a buffer to be human. The Center must therefore be preserved as a key link in our national fire program.

4) The Fire Administration needs more specific information on the public's awareness of fire to help direct its efforts most effectively. We do not know where we stand today nationally on prevention programs and their effectiveness. We need to know the extent and nature of fire department public education programs in use nationally. We need to know the percent of school systems that include fire safety in the curriculum, and whether their content is effective. We need information on how the public's attitude and knowledge about fire safety are developed, and what the leverage points are. For example, what role are newpapers and TV programs and other media playing in shaping attitudes about fire safety, as they have for crime. This information would be useful to private industry fire safety programs as well.

5) Industry should be called upon to do their part in fire safety, especially the insurance industry. It reports major financial set backs because of the gap between premiums received and payouts for losses, but has not begun to use the new information available to develop prevention programs that could reduce the losses. Further, in many countries the insurance industry has

adopted a policy of not paying for a building that burns down unless a similar building is built on the same spot. That is a powerful disincentive for arson. We might consider that, too.

6) We have learned a great deal about the fire problem in the U.S. through the development of the National Fire Incident Reporting System (NFIRS). It provides data for targeting prevention and for other management decisions in thousands of fire departments today. It needs to remain strong and continue to accept additional fire departments.

The national fire data need to be analyzed and displayed as models for state and local fire agencies, as well as to be benchmarks for local departments to compare themselves against.

Key findings need to be followed up to find out the why's behind the data. For example, when Pittsburgh and Philadelphia show up high in fire death rates, as they did in our international comparison of cities, we need to know why. When Illinois suddenly joins the southeastern states in high fire death rate, we need to know why.

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From the positions I've held both within and outside the Fire Administration, I believe that it has had a significant impact while operating on a tiny budget as Federal agency budgets go, a budget that is a fraction of that asked for by the bipartisan commission that led to its formation.

Other countries realize that one of the main reasons for civilization is the mutual defense against threats such as fire. While most of the fight is at the local level, nations as diverse as France and Japan have strong federal fire organizations that provide leadership, data, research, and training. We need to have the same if we are to be as successful as they are in keeping people from suffering the enormous personal and economic losses we have today from fire.

Mr. WALGREN. Thank you very much, Mr. Schaenman, we appreciate that. Well, let me turn then to Dr. Magee and especially apologize for the mixup in the committee's invitation, and I know that we did not reach you in a timely way and we appreciate very much your going out of your way to be with us and to pull some thoughts together that we should consider about the Center for Fire Research.

STATEMENT OF DR. RICHARD S. MAGEE, CHAIRMAN, CENTER FOR FIRE RESEARCH PANEL OF THE BOARD ON ASSESSMENT OF NATIONAL BUREAU OF STANDARDS PROGRAMS; PROFESSOR OF MECHANICAL ENGINEERING, STEVENS INSTITUTE OF TECHNOLOGY, HOBOKEN, NJ

Mr. MAGEE. Thank you, Mr. Chairman. As chairman of the National Research Council's Evaluation Panel for the Center for Fire Research and on behalf of the panel, I would like to reiterate our belief in the essential national need for the Center. The United States has a fire problem and technical solutions to this problem can be accomplished only if funding commensurate with the Nation's needs is allocated in full recognition of CFR's legislative mandate to conduct and coordinate the Nation's fire research.

I would like to direct my remarks to five areas this morning. The first area is the need for fire research; second, the quality and relevancy of the work at CFR; third, the impact on the universities; fourth, the role of the private sector and fifth, the ultimate outcome if the program is eliminated.

The need for fire research. The fire problem in this country is well documented. The U.S. death rate is one of the highest in the world; in fact, only Canada has a similar fire death rate. The Center for Fire Research is the only comprehensive research program in the United States directed at reducing fire deaths, injuries and costs to fire. This research is paying off.

Since 1976, the U.S. fire loss record has improved more than any other industrialized nation. However, despite this improvement, each year fires result in 7,600 deaths, almost 300,000 injuries and $6½ billion in direct property losses. I consider this unacceptable. Research is needed to alter these figures.

Regarding the quality and relevancy of the work at CFR, the panel has found CFR personnel to be highly motivated, extremely productive and geared to maintain the high standards of work associated with the Center. The panel believes that these characteristics are a result of a strong dedication of the professional staff to reduce fire fatalities and losses through advances in fire science.

Let me give you three examples of the work ongoing at CFR. The Center for Fire Research is the world leader in the development of mathematical fire models and computer simulation. These techniques will establish the basis for improved fire safety while providing engineers, architects, building owners and occupants, and code officials with the ability to provide the necessary fire safety at reduced cost and greater flexibility.

It is now possible to predict the spread of smoke, toxic gases and heat from a fire in a single room to other parts of a building. This permits the prediction of the fire hazard to the building occupants

at different locations in the building as a function of time. These essential tools are just coming into use and represent the beginning of an important transition in fire protection practice; a transition from traditional practices such as costly "build and burn" to the use of scientifically based models and evaluation tools. When fully implemented, these new tools could lead by the end of the century to further reductions in fire deaths of as many as 3,500 lives per year and fire protection costs to society of $15 billion per year.

In addition, CFR serves an important applied research function for the development of fire test methods for use in the United States in establishing compliance with prevailing national codes and standards. This function cannot be carried out elsewhere within the Government or the private sector, and is an essential element in ensuring fire safe building designs.

Third, national concern and confusion continues regarding toxicity resulting from fire. There is a vital need to move the field of combustion toxicity from a focus on the intrinsic toxicity of individual materials in small scale, single environment tests toward one on the toxic hazard created by combinations of materials burning in nonequilibrium environments. The Center for Fire Research is providing the leadership for this change.

The three examples cited above give some insight into the importance and impact of CFR's basic research efforts.

The third area, impact on the universities. In addition to the in-house research, the Center for Fire Research supports fundamental fire research at about 25 universities and other organizations. The Center provides about $2 million annually or about one-third of the appropriated budget for this purpose. The long-term fostering of a supply of fire scientists and engineers through financing their research apprenticeships in graduate school is extremely important to the Nation's fire research efforts. Most of the fundamental research on fire at U.S. universities will terminate without CFR's grants program, and the supply of scientifically trained professionals will dwindle.

The fourth area, role of the private sector. The proposed elimination of the Center for Fire Research is based on the premise that, "This research is more properly the role of the private sector and State and local governments." The panel finds that this premise is totally without foundation. It simply will not happen. Fire problems are too complex so that no single industry or group can possibly undertake them.

New research developments are making it possible for us to consider practices in fire protection and fire safety evaluation that, until recently, were considered either impossible or impractical. Yet no single group or organization has the means to exploit this opportunity alone. To fully exploit these opportunities will require a coordinated effort among both private and public sector institutions in fire protection and research.

The Center for Fire Research has initiated this important task of coordination by taking the lead in calling together representatives of the key organizations to a National Fire Research Strategy Conference that will provide the policy guidance, and will establish the necessary roles to achieve the needed reductions in fire losses. The

first meeting of this conference has been held and a second is scheduled for this July.

Finally, the ultimate outcome if the program is eliminated. Elimination of CFR would devastate U.S. fire efforts in the following ways: One, the only comprehensive U.S. research program directed at reducing fire deaths and injuries will disappear. Two, fundamental research needed to support the public and private sectors in reducing the cost of fire protection will end.

Three, most of the fundamental research on fire at U.S. universities will terminate without the NBS grants program. Four, the flow of new fire safety technology for highrise buildings will be reduced. Five, further work on combustion product toxicity will be limited. Six, badly needed fire test technologies will not be developed. Seven, important cost savings opportunities in fire-safe building design will be missed. Eight, fire protection officials and industry will lose the only central U.S. national fire research laboratory. Nine, centralized research to identify and respond to serious new sources of fire loss will be nonexistent.

Ten, introduction of computer-based fire simulators to assist designers, code officials, and firefighters will cease. Eleven, fundamental research and programs that support other Federal agencies and State and local governments will be eliminated. Twelve, the great strides made within the past year to rally industry interest and support for a coordinated national fire research effort will be lost. Finally, thirteen, the United States would be the only major industrialized nation without a national fire effort.

Termination of the Center for Fire Research would cripple progress toward this Nation's goal of reducing loss of life and costs. The ultimate cost to the Nation in suffering, loss of life, and economic disruption will be significant.

In summary then, one, the fire research needs of the Nation are real. Two, the work at CFR is relevant, timely and of outstanding quality. Three, the impact on the universities of the elimination of the program at CFR is serious and will seriously hinder future fire research efforts in the Nation. Four, the premise that this fire research effort will be carried out in the private sector lacks foundation and is totally unrealistic. And finally, the elimination of CFR would have a drastic effect on the progress of U.S. fire efforts.

I thank you for this opportunity to address the committee on this critical issue. I'll be happy to answer any questions that you might have.

Mr. WALGREN. Thank you very much, Dr. Magee. That's a clear statement and one that will stand out boldly in the record and be there for those who might have any doubts.

In the report, "America Burning," in 1974, the minority opinion in that report concluded with some reservations, but indicated that certainly 10 years from now we ought to take another look at it and review it. Various assessments have been made, as I understand it, by FEMA and others, but we have not had a commission relook at it.

Do you think there's any value in trying to pull together a private or—by that I mean a nongovernment agency review of the recommendations in that report and what progess we've made, or

is the report obvious enough that we can look at it and say that it really remains as the basic direction we ought to take?

Dr. Bland, can you respond to that?

Mr. BLAND. It's obviously a question that I've struggled with. My feeling, Mr. Chairman, is that the reconvening of a—or the convening of a new commission would probably just plow the same area. There probably is some maturity and some learning curve amongst the existing commissioners, or the former commissioners. There might be something said for getting those people together for some limited amount of time.

But I think "America Burning" still reflects the fire problem in the United States. And it's my own personal opinion that the system proposed at the time, at least the framework, is still the optimal system for this country. I guess if you integrate that from minus one to plus one, it says let's get out what "America Burning" recommended in the first place and not waste our time and money in replowing the same acreage.

Mr. WALGREN. Well, let me broaden the ground, and then also ask if the others would like to comment, and that would be looking back over these years, what have you felt have been the successes and what have you felt have been the greatest disappointments in areas that we could have made progess and didn't?

Mr. BLAND. The success has been the Academy, in primarily that of maturing what I'll call the fire suppression forces in the country. The Academy has—is indeed a framework that can bring those people together, and I think has done quite well.

Mr. WALGREN. Those people are they—I'm sorry?

Mr. BLAND. I beg your pardon; the Academy, the National Fire Academy.

Mr. WALGREN. And then which people to be brought together?

Mr. BLAND. The suppression services. But as I tried to say in my testimony, the fire community is much broader than that, and my concern within the Academy is that it has not brought those groups together.

I think an example here would be an interface between the CFR people and the Academy. That is not a visible interface. I understand the intent was there, but it never came to fruition.

The basis for that, sir, is an experience that I had in a court case where we found that the educational requirements for a firefighter—the court found—were minimal. That, and the Commission saying that we needed to upgrade the educational standards of the firefighter, read his capability to operate in a highly professional manner. The court found that we could not require any educational standards. It makes it a very difficult case to interface with a place like CFR.

So the Academy is a part, but a part of the Fire Administration that I think has done about the best it could do. Let me put it this way. I think the Federal Government has done about what I would think would be a reasonable limit for we, the firefighters. I think it's time now that we, the firefighters, begin to look at the fire problem in a broader sense in this country and took a more professional position in such things as Mr. Schaenman recommends and some of the broader aspects of the fire problem.

My disappointment is probably the fact that the Administration, the Fire Administration, was kind of thrown out as a baby with the bathwater somewhere. I think I understand politically why that happened. I don't understand how that can happen relative to the American public. The U.S. Fire Administration, the U.S. Fire Academy, the Federal Government has an obligation to the public. It's the public that suffers the ravages of fire, it's not the fire service. And I think it's disappointing that we have not focused more in the service to the public in the United States in the U.S. Fire Administration. That's from a personal view.

What can be done? I think—my own view is we've just got to go back, take a look at the basics and maybe start over.

Mr. WALGREN. Can I ask Mr. Schaenman to address the same subject? Looking back over 10 years, what do you feel the successes have been and where have you felt us falling short of our potential?

Mr. SCHAENMAN. I think there's been a tremendous success in getting the process started, but I think we're way short of getting to the point where the average citizen is careful about fire, we're way short where the average fire officer has a deep training in prevention and a deep concern about it. I think we're still way behind the rest of the world, as I mentioned in my testimony.

I think a second cut at "America Burning" would be extremely valuable as America's still burning. I think we had an enormous impact from that report. I think that's one of the reports generated by a national commission that really did have a significant impact on the public and the fire service of lasting value, and I think it's very important to take a second look. I don't think everybody's aware of either the achievements or the tremendous gap still left.

So I think we need more publicity about what's going on throughout the fire service, throughout the other communities that Dr. Bland mentioned, but the biggest shortcoming is still that the average citizen hasn't been getting the message much more than he did 10 years ago.

Mr. WALGREN. Dr. Magee, although you focus quite directly on the Center for Fire Research, which of course was one of the major recommendations of that report, I'd like to ask you if you can address that problem broadly or specifically with respect to the Center, if you'd like?

Mr. MAGEE. Yes, sir. I, for one, have never been against looking where we've been and looking where we're going ahead, so the idea of possibly evaluating where we've come in 10 years and the progress and the foundations we have to build for the future could be, I think, beneficial and might heighten awareness on certain people's parts of how far we have come.

I would say that the frustration that I perceive is that people would then say well, we're not half way there because we had talked about 20 years. And my argument to that is, I don't believe you've ever really funded the program at the level it was intended to be to do the job.

As far as the Center for Fire Research is concerned, the panel, in its interfacing with the management at CFR, is continually working with them to say well, we only have this many funds and despite the fact that the legislative mandate wants us to do A, B, C,

D, E, F, and G, if we were to attempt to do all of those we would make little, if any, progress in any because we just would not have a critical mass of funds to go ahead and do it.

And therefore what we've tried to do in our own crystal ball with management is to determine what are the essential elements of the CFR mandate that should be done first; recognizing we would have liked to have done some others.

So where's our success? When I think back how little we knew about how materials ignite, to how a simple matter of how a flame on a surface spreads from this part of the table to that part of the table, when I recognize how little we knew about how waters put out fire when we started, it amazes me that our understanding of basic combustion phenomena, as I say, to the point where we can now model a fire buildup in a room to time to flashover, that we can model the transport of smoke and toxic gases to a highrise building to be able to determine carbon monoxide levels is a function of time which we can then tie into life hazard.

When I see the impact we've made on design changes in areas such as health care facilities, I'm extremely excited. I mean, I think it's exciting the technologies are getting out there; it's making an impact, and I think the professionals that have devoted their lives are very dedicated and are to be commended.

However there are shortcomings. For example, this whole area of prevention and the idea of human factors in fire. I don't think human factors is an area that we've really spent very much time addressing. But again, as one of the panel members once said, you know, we don't study smoke production and smoke transport because we're concerned about whether drapes get dirty or not. But what we are concerned about is what is the impact of that smoke and other things on people and fire, and I think we have to do more work in that area.

I believe a second area that we're aware of and we're working on is this whole area of transfer of our findings to the fire services, and I think I've heard that already. I think there are research facts, there are research findings that we're working on and struggling for the best means of getting that information out to people. There's a new program underway at the Bureau to develop a fire simulation laboratory which will allow actual people, whether they be designers, whether they be people in the fire services, to come in, get some hands on equipment to see what some of this scientific modeling effort can do, and being able to understand how fires come along.

The area of toxicity, which I think is probably the biggest area in fire in the country right now, the effect of toxicity in fires, unfortunately we're letting it be established in many cases in the courts right now. We need more effort—again, our funds, to come up with a good risk assessment method for determining toxicity of materials, both in combination and singularly.

Again, I don't want any of my remarks to be construed that I think that the reason we're not there is because of any inadequacy based on the professionals doing their job. But if you've only got so many dollars, and the dollars have not increased, and the job is still as big as it was when you first started out, we have to make choices. And I believe that the panel is in support of those choices.

I think we're allocating our resources as best we can, so if we were to go back, in fact, and do a reevaluation of where we are 10 years later, I think we have to do it in the light of have we really allocated the resources to meet the Nation's fire needs? And I think the answer, for all honest, would be no, we haven't, but we've done one heck of a job based on what we have—the funds we've had so far.

Mr. LUNDINE. In other words, if you had more funding, you would do more work on toxicity?

Mr. MAGEE. Well, I think that's one area and I'd say there are other areas that I tried to mention that don't have the same priority. I don't want you to say that that toxicity question is not being addressed, OK, but it's a difficult question; it's a very emotional question, and there are other areas as well: For example, the whole question of sprinklers and the smoke detector work and the movement, design of buildings to transport smoke and gases from one place to another. I mean, they're all part of the problem and someone has to make a decision; if the pot of money is too small to really address the problem, you know, how much do you allocate to each particular area?

Mr. LUNDINE. I understood that. I was just particularly interested in that work, and wondered whether or not there was an opportunity to take it further, that was really inhibited by funding.

Mr. MAGEE. I would say that's one area that would certainly have—additional funding would move that one along.

Mr. LUNDINE. I would just like to ask the panel, whoever would like to respond, one other question. How do you think the Federal Government would be best positioned to support and reinforce State and local efforts to reduce fire loss?

Mr. MAGEE. Again, I'll finish up and you can go back to the other end. I think one needs to have a national coordinating effort. The problem is very complex, it's very diverse in the sense that it's spread out across the country, and I think the complexity of the problem requires a coordinated effort. And I think right now I see the Center for Fire Research taking on that effort, being supported. We're talking about a national—we already had one national conference and another one coming up, and I think that you have to support that central effort. If not, I don't think you're going to going to get it done. The money is going to be just filtered away on a local level.

Mr. LUNDINE. Any of the other witnesses care to make a comment?

Mr. SCHAENMAN. Yes. I would agree with that as far as the positioning is there. It's just a skeleton force and it needs to be reinforced. They need the resources to do their job, they need the people to do the job, and I think very strongly it does require a national leadership in order to get the impact at the State and local level.

You have a toxicity issue being discussed in the New York State Legislature today mainly because it was raised at the Federal level, I believe.

Mr. LUNDINE. That was one of the reasons for my particular interest. I would like to, on behalf of Chairman Walgren and the entire subcommittee, thank the witnesses. I assure you that all the members of the subcommittee will be made aware of the informa-

tion you've provided here. It is a terribly important subject and we really appreciate your advice and counsel.

I would now like to ask for Mr. Joseph L. Donovan, Superintendent of the National Fire Academy, of FEMA, who would be, as I understand it, accompanied by Edward M. Wall, Acting Administrator, U.S. Fire Administration, if they would present their—or you would present your testimony?

STATEMENT OF JOSEPH L. DONOVAN, SUPERINTENDENT, NATIONAL FIRE ACADEMY, FEDERAL EMERGENCY MANAGEMENT AGENCY, ACCOMPANIED BY EDWARD M. WALL, ACTING ADMINISTRATOR, U.S. FIRE ADMINISTRATION, FEDERAL EMERGENCY MANAGEMENT AGENCY

Mr. DONOVAN. Thank you. I am Joseph L. Donovan, Superintendent of the National Fire Academy in the Federal Emergency Management Agency. Today I am representing the Honorable Clyde A. Bragdon, Administrator of the U.S. Fire Administration, and Acting Associate Director of FEMA's Training and Fire Programs Directorate.

As you know, Mr. Bragdon suffered a heart attack several weeks ago and is therefore unable to be here today. He continues to make a steady recovery and is resting at his home in Frederick, MD. It appears that his recovery is within the bounds his doctors hoped for and his recovery and recuperation period will take about 2 months.

With me is Mr. Edward Wall, the Acting Administrator of the U.S. Fire Administration. He will join me in answering the committee's questions.

Mr. Chairman, fire is a serious problem in the United States. Every single day in newspapers and on radio and television our senses are heightened by accounts of the ravages of fire and the tragedy of those affected by fire. Your committee today will consider the administration's request to reauthorize appropriations for the activities of the Federal Fire Prevention and Control Act, Public Law 93-498, and I am pleased to have this opportunity to appear before your subcommittee, Mr. Chairman, to justify this request.

The Federal Fire Prevention and Control Act became law in October 1974. It is therefore appropriate to take a moment to review our accomplishments and our goals as we enter the second decade of service to our citizens.

The stimulus for Federal involvement in fire prevention and control activities came from the President's National Commission on Fire Prevention and Control and the publication of their startling report, "America Burning." This dedicated, blue ribbon commission recommended establishment of a national fire administration and presented a plan detailing how fire losses in America could be cut in half in a decade.

The report noted that each year 12,000 citizens were killed in fires, 300,000 were injured, and almost 3 billion dollars' worth of property was destroyed. Progress has been made, deaths have been reduced significantly over the past decade, but the United States

still has one of the highest fire death rates in the industrialized world.

Our improved system of identifying problem areas gives us a clearer picture today of the fire problem. For example, in 1983, 6,000 people died from fires including 108 firefighters; 135,000 people were injured and there were 2,300,000 fires with over 6.6 billion dollars' worth of property losses.

The Federal Government has had a fire focus since 1975 when President Ford appointed Howard Tipton as the first Administrator of the U.S. Fire Administration. Since the inception of the Fire Administration the various administrators and staff have worked assiduously on focusing attention on America's fire program and on developing programs to reduce the annual loss of life to fire. They have been successful in many areas. Many factors have contributed to the loss of life reductions.

We think the Fire Administration and the National Fire Academy can share in the credit due in part to their efforts in public fire education and in the development and implementation of the smoke detector technology. There was a significant sharing of roles in these areas with the National Bureau of Standards Center for Fire Research and the Consumer Product Safety Commission; a statement of cooperation among Federal agencies.

Mr. Bragdon has declared his intent to continue building on the foundation established by his predecessors. FEMA's fire programs will continue to be the preeminent force in focusing attention on the fire problem and solutions to those problems. We recognize that the ultimate solution to the fire loss problem resides at the local level. We, therefore, will continue to offer support that will build capacity at the local level to deal with that realization.

We are fortunate to have available a network of over one million paid and volunteer fire service people who, through their local departments, form the nucleus of support to accomplish the mission we have. That support and donated time is essential as we strive together to reduce fire losses.

Since becoming Administrator, and assuming the position of associate director for training and fire programs on an acting basis, Mr. Bragdon has experienced a strong level of support given the fire programs by this administration by the Honorable Louis O. Giuffrida, the Director of FEMA; and by other elements within our agency. He is also heartened by the level of interest and support we have received from the Congress, and particularly of the continued interest of you, Mr. Chairman, and the members of your subcommittee. We are grateful to receive such a support.

While FEMA's two fire functions, the U.S. Fire Administration and the National Fire Academy, have separate roles, they share a common goal—to save lives and reduce losses from fires and related emergencies. The Fire Administration works to accomplish this goal through programs and research and applied engineering projects, and the Fire Academy through training and education.

Representing Mr. Bragdon's role as Administrator of the U.S. Fire Administration, I would like to present priorities for reducing fire losses in this country.

The first step in solving any problem is understanding the cause. By collecting and analyzing State and local fire data through the

National Fire Incident Reporting System, NFIRS for short, the U.S. Fire Administration staff pinpoints how many people are affected by fire, what areas of the country have the highest risks, what age and economic groups are most seriously threatened, and what types of factors cause the majority of fires. Armed with this information, the Fire Administration is able to devise programs to put their resources to work in the areas of greatest risk.

The priority areas identified are residential fires, arson, firefighter health and safety, fire service multiagency operations, and fire service management efficiency. Today we would like to focus on what the Fire Administration is doing in the most critical need area, residential fires.

Residential fires are the Nation's predominant fire problem. Residential fires account for 80 percent of all fire deaths and 65 percent of all injuries, yet only 40 percent of fires occur in residences. Residential fires kill and maim at an alarming rate. Accordingly, the goal for the second decade of the Fire Administration is establishing Fire Safe Homes in every community of this country.

To promote residential fire safety, the U.S. Fire Administration is emphasizing two programs; Partnerships Against Fire, a community volunteer fire prevention program, and the national Residential Sprinkler Program. These two programs are important to reducing the residential fire problem.

Fire is, by and large, a problem created by man. It follows that any solution to the problem will necessitate involving and educating the public to a greater degree in the nature of the problem. Apathy has always been fire's greatest ally. Until we establish working relationships within the community to combat fire, our gains will be minimal. The Fire Administration seeks to create a cohesive partnership with the general public, the private sector, volunteer and community based organizations, the fire service and Government. The goal is to establish such a partnership.

The Partnerships Against Fire Program is precisely that type of program. Started in 1984, it is built around the concept of total community involvement. The various elements of the community share not just the responsibilities, but the benefits as well. Thirty pilot programs were established in 10 States last year. Just last month, 10 more States were added along with the District of Columbia. We point with pride to the first 30 programs, some of which are up and operating. Let me illustrate how these work.

In the State of Pennsylvania, the Museum of Scientific Discovery in Harrisburg was selected to set up an urban fire safety program. The Museum staff developed a computer project to educate children about fire and smoke spread in the home. The program provides each child with a personalized fire escape plan that can be taken home, discussed and practiced. In addition, a room is being designed within the Museum where actual escapes can be practiced.

The beauty of these community programs is that they can be expanded, modified and transferred to other communities with similar fire problems. It is an example of a local problem being solved at the local level with local involvement. We believe self help is the key to Federal, State, and local relationships. Government cannot and should not do it all.

The second major initiative underway in the residential fire area is the advancement and use of quick-acting residential sprinklers. It would be naive to think that all fires can and will be prevented. Therefore, we need to develop programs to protect our citizens, our homes and our property. Smoke detectors, a major program thrust of the Fire Administration for many years, have contributed to the saving of countless lives, but they only warn of the danger. They do not stop it.

We are now achieving technological improvements in fire protection and prevention that were not even considered a decade ago. These advances make fire safety in the home more feasible and practical than ever before. With more than 1 million housing starts a year, we know that quick acting residential sprinklers in every home will not happen today or tomorrow. Retrofitting existing dwellings will be a large task also, but we now have the technology to start building residences for a firesafe America. Working in concert with other fire safety programs, residential sprinklers could be the breakthrough we have been searching for to save lives and reduce fire losses.

To increase public awareness, the Fire Administration is retrofitting 20 mobile home trailers with quick acting residential sprinkler systems to demonstrate their effectiveness. Designed to simulate typical living areas, these trailers will be located around the country and will be available for public demonstrations.

We would encourage any member of the subcommittee to observe one of these sprinkler demonstrations. As you observed last year, Mr. Chairman, the fire is set, the flames appear, the sprinkler goes off and the fire is extinguished, usually before the smoke detector has even sounded.

There are a number of other efforts underway in the residential fire area that include Juvenile Firesetter Counseling and the Sesame Street Fire Safety Program. The Fire Administration has numerous programs in the four other problem areas we identified earlier; arson, firefighter health and safety, fire service multiagency operations and fire service management efficiency. In the interest of time, we ask that a listing of these programs be made part of the record.

[Material referred to follows:]

U.S. FIRE ADMINISTRATION

The Federal Emergency Management Agency's (FEMA) U.S. Fire Administration is divided into four Offices: Fire Policy and Coordination; Firefighter Health and Safety; Fire Prevention and Arson Control; and Fire Data and Analysis. With input from the members of the Joint Council of Fire Service Organizations, priorities were established for each of these program areas to guide allocation of the resources of the Fire Administration most effectively to meet its primary goal: Improving fire safety in the United States.

Following is a discussion of the priorities and programs for each office:

OFFICE OF FIRE POLICY AND COORDINATION

Responsible for overseeing the management and administration activities of the USFA and conducting programs which impact on fire and rescue service management practices.

Leadership Conferences

Leadership Conferences are planned for a number of groups including State Fire Marshals, Public Fire Educators, Metro Chiefs and others.

Private Sector Initiative

Initiate several new programs to broaden the participation of the private sector in fire programs. A particular emphasis will be on attracting private sector resources for local fire service programs.

Integrated Emergency Management System (IEMS)

The USFA is working with the nation's fire service on FEMA's long range strategy for improving program implementation in developing Emergency Management capabilities of state and local governments across all hazards.

Volunteer Fire Service Initiative

USFA will carry out an effort to support the volunteer fire service including activities to improve the retention of personnel at the local level and enhance volunteer fire service roles in the total fire program.

Fire Executive Fellowships

USFA is conducting a number of activities to support the development of the working fire executive roles. This will include cooperating with the National Fire Academy in the development of their Fire Executive Management Program. For example, in

FY 1984, the USFA/NFA has initiated a FEMA Fire Executive Fellowship Program with Harvard University.

Coordinated National Fire Prevention Program

USFA will initiate a variety of health and safety, fire prevention and data activities to carry out a national coordinated strategy including public education, residential sprinklers, community volunteer, private sector initiatives and others. In FY 1984, the National Community Volunteer Project was initiated.

Regional Fire Representatives

Regional Fire Representatives have been established in each of FEMA's 10 regions. The USFA will utilize the Fire Representatives in a variety of supportive activities including the NFIRS Program, community based fire prevention efforts, relationships with state and local fire services and other areas.

OFFICE OF FIRE PREVENTION AND ARSON CONTROL

Responsible for all fire prevention and public education programs and responsible for mitigation of the arson problem in the United States.

The following are various projects within this office:

Community Based Volunteer Fire Prevention Program

The purpose of the Community Volunteer Fire Prevention Program is to increase the scope and effectiveness of local fire prevention efforts through a unique merger of local, State, and Federal resources through the private sector to support new and existing community fire prevention, education and protection programs.

Residential Sprinkler Systems Program

The purpose of the project is to improve the public and private sectors awareness of the benefits and technological improvements in residential sprinklers, and promote their adoption and use at the local level. Through the increased use of this technology, the level of life and property loss due to residential fires will be significantly reduced.

Juvenile Firesetter Program

This on-going project has resulted in the development of two handbooks for juvenile counselling. These handbooks help to provide guidance to personnel dealing with juvenile firesetters. A final manual and monograph are being developed

and will culminate in a complete program that will offer direction for personnel when dealing with juveniles from the youngest of children through those in adolescence.

Arson Information Management System

AIMS is an on-going project that provides a balanced management format for handling arson data utilizing microcomputers. The AIMS system provides data which can be utilized for proactive and reactive strategies. That is, reactive strategies that consist of timely investigation management decisions and proactive analysis used to predict arson prone buildings or situations.

Rural Arson Project

Two projects in the rural arson area are in progress. The one deals with identifying the arson problem, suggesting strategies to mitigate the problem and finally measuring the success of those strategies. The second project is studying the feasability of using an AIMS approach in rural arson investigation. Both projects are being closely coordinated so that all information is being utilized by both projects.

AIMS Enhancement Program

The purpose of this project is to develop AIMS software that will be compatible with the most commonly used microcomputers in use by law and fire service organizations. This will allow the AIMS system to be available to the majority of both services throughout the U.S.

Sesame Street Fire Safety Program

The continuation of this highly successful, award winning project, designed to help communities develop fire safety educational programs for preschool children, will further expand the project to include older children and also develop tools for local fire departments and other organizations to use in establishing Sesame Street Fire Safety Programs locally.

OFFICE OF FIREFIGHTER HEALTH & SAFETY

Priorities for this office include assisting in the development of improved protective clothing and equipment, enhancement of personnel safety through improved training and improving diagnostic and immediate care procedures for fire victims. Various projects within the office are:

Apprenticeship Training

Managed by the International Association of Firefighters, in cooperation with the International Association of Fire Chiefs, is a continuation of support for development and tracking of basic fire training and related work in cooperation with municipal governments.

Project FIRES (Firefighter Integrated Response Equipment Systems)

Through grants to the International Association of Firefighters, the IAFC and fourteen cities across the United States, the USFA is continuing research, development, and testing of an improved turnout suit for structural firefighting. The USFA is working closely with industry to encourage the incorporation of new innovations into commercially available equipment.

Low Profile Breathing Apparatus

The USFA will continue to work with the U.S. Bureau of Mines, the U.S. Coast Guard, and the U.S. Divers Corporation in the research and development of a long duration (2 hour) positive pressure, rebreather system. A prototype of this system is currently undergoing manned testing.

Medical Management of Victims of Smoke Inhalation

This continuing project will provide a diagnosis and treatment protocol for smoke inhalation victims based upon information derived from a clinical, e.g., emergency room setting. The American College of Emergency Physicians will publish and otherwise disseminate a resulting treatment algorithm throughout the appropriate medical community.

Firefighting Tools and Equipment Research and Development

This initiative is aimed at identifying innovative tools and equipment applicable to firefighting, modifying or improving on designs where appropriate and transferring that technology to departments across the country.

Fire Department Safety Officer's Reference Guide

An increasing number of fire departments are expected to establish fire department safety officer positions. The USFA is working with the National Fire Protection Association to develop a safety officer's guide that promises to be a valuable resource for fire department personnel with responsibilities for establishing and managing programs directed at decreasing the incidence of firefighter illness, injury and mortality.

Hazardous Materials Suit

FEMA Director, Louis O. Guiffrida, has directed the USFA to support and participate in the development of a hazardous materials suit for the fire service.

One of the critical requirements that this suit must have is that it be capable of being donned in a reasonably quick time. The suit will be fully encapsulating and should provide protection against a wide range of chemicals. Protection against the widest range of chemicals will increase the utility of a superior hazardous materials suit.

Smoke Detector Effectiveness Research Project

The primary objective of this study is to determine problems effecting smoke detectors. Specific areas of concern include: determine service life; sensitivity, and calibration of smoke detectors.

Firefighters Short Range Communication System

Through a cooperative agreement with the National Aeronautics Space Administration and the U.S. Coast Guard, the USFA is developing a hands-free communications system for firefighters.

Sidewall Residential Sprinklers

In cooperation with Factory Mutual, the USFA is performing fire test on sidewall sprinklers. The results of these tests will be made available to the concensus code organizations.

OFFICE OF FIRE DATA AND ANALYSIS

Priorities for this office are to ensure effective fire data collection on a national basis; to develop a data bank of timely, accurate and retrievable information; and to continue analysis of major and/or unusual fires.

National Fire Incident Reporting System (NFIRS)

To ensure the collection of accurate fire data throughout the United States. The NFIRS program will focus on upgrading the quality and completeness of current data.

Technical Improvement & Support

Working with FEMA's Office of Information Resources Management, the USFA is continuing to collect, process and feedback to users data on the U.S. fire problem. Initiatives in this area will be aimed at developing more useable formats for data feedback.

developing an improved version of the NFIRS data collection form and streamlining the data collection process.

In addition, the USFA will continue providing technical support and training to users through the National Fire Information Council. Annual and regional workshops will provide users a forum to exchange information and to review innovations in data management and analysis.

Analysis of Major and Unusual Fires

This project will continue in partnership with the National Fire Protection Association and Center for Fire Research, National Bureau of Standards, to develop case studies for use in an Advanced Fire Strategies Course to be offered by the National Fire Academy.

Kerosene Heating Survey

A National survey is being conducted to determine the magnitude of the fire problem related to the use of portable kerosene heaters in the United States.

Firefighter Death Survey

A special study will be conducted to gather more accurate statistics on firefighter deaths and their causes. Data will be analyzed to determine how these deaths can be prevented and/or reduced.

Special Studies and Reports

The USFA will continue to conduct and publicize special studies and reports on current issues facing the fire and rescue service, as well as the annual assessment of the magnitude of the U.S. fire problem. For example, the following project has been initiated:

- Fire Data Management Information Demonstration Project

  This project is to assess how local fire agencies actually utilize operational information in making management decisions and to develop system recommendations to allow the use of modern computer technology to assist in making these key operational decisions.

Now, Mr. Chairman, we would like to turn to the current programs and plans for the National Fire Academy, located at the National Emergency Training Center in Emmitsburg, MD.

The Federal Government purchased the site for the now National Emergency Training Center in the spring of 1979, and the first Fire Academy classes were held in January 1980. This is a remarkable accomplishment when one realizes that the staff was able to develop curricula, hire faculty, provide student facilities and deliver advanced training programs without precedent in a few short months.

In just 5 years of operation at the Emmitsburg campus, over 30,000 students from every State in the Union have been trained in a variety of courses created to advance the professional development of fire service personnel and of other persons engaged in fire prevention and control activities. In these 5 years, the Fire Academy has gained a national reputation and international reputation, I might say, as an institution of excellence whose courses are eagerly sought by students desirous of improving their abilities and enhancing their potential to impact on our Nation's fire problem.

In addition to the on-campus courses, over 90,000 students have attended courses developed by the Fire Academy and delivered in every State throughout the country. These courses have been supplemented by courses where the Fire Academy trains State and local trainers, who in turn take the courses and train their own local personnel. Over 40,000 State and local fire service personnel have been trained by these trainers since the program was initiated in June 1982.

Another training opportunity, referred to as our open learning program, provides fire service personnel the opportunity to continue educational opportunities at the upper college level, that can result in a baccalaureate degree in a fire service curriculum. Five thousand students have availed themselves of this opportunity.

In fiscal year 1984, the Academy was responsible for the delivery of 1,841 course offerings to 56,324 students which generated 1,268,435 student hours of training activity throughout the United States. The cost of these programs is shared among the Federal Government, State, and local governments, the individual students and, in some cases, by the private sector. The total Federal cost for this program in fiscal year 1984 was $10,700,000.

Our courses are continually updated with the infusion of new technology and information and new courses are added each year to our curriculum. We are proud of our new master curriculum plan which defines the field of firefighter safety and professional development from top to bottom. It is structured to allow fullest growth and learning potential at each level; executive fire officer, command and staff, fire service technical specialist and line officer.

Because of our conviction that effective delivery of public services in an era of shrinking resources requires a conscious investment aimed at enhancing the quality of management in the public sector, the Fire Academy and the Fire Administration have entered into an agreement with Harvard University that permits five senior fire service executives to participate in the John F. Kennedy School of Government, at Harvard University, each summer.

This prestigious opportunity is another example of the emphasis we are placing on assisting the senior fire official to deal with the increasingly difficult task of delivery of an effective and efficient public service in a very competitive environment.

We are most concerned with our inability to accept all student applications for course admission. Unfortunately, our facility is not large enough to accommodate all the qualified applicants we receive and we must operate on a first come, first serve basis. In 1984, we had turned down over 4,783 applicants. This year, for instance, in just two hazardous materials courses alone, over 700 qualified applicants had been turned away as of the end of January. In the fire arson investigation course, which includes both law enforcement and fire personnel, nearly 400 applicants had been rejected due to space limitations.

Because of our limited capability, the Congress has approved expanded development of our facility in a western campus in Carson City, NV. The opening of this new campus will compliment our existing campus in Emmitsburg, MD. The NETC site will continue to be the prime location for course development and the Executive Fire Officer and Command and Staff Programs that require the national perspective and interaction for which the Academy has become known.

We appear before this committee proud of our accomplishments, and with a positive spirit in reporting this administration's response to the mandates of the Federal Fire Prevention and Control Act. However, Mr. Chairman, we cannot delude you or the citizens of this country with the suggestion that the national fire problem has been solved.

Although there has been a significant reduction in the number of fire deaths, the enormous losses are still unacceptable. These fire losses cannot be ignored by a Nation concerned for the welfare of its citizens. There is a great spirit of public service and dedication among the Nation's firefighters and the many citizens who dedicate their time, lives and energy for the common good. We pledge our comprehensive and committed efforts to take positive actions that contribute toward the national goal to stop "America Burning."

We, therefore, respectfully request the authorization of appropriations in the amount of $19,322,000 for activities under the Federal Fire Prevention and Control Act of 1974. This authorization request is consistent with the President's budget and freezes most programs at the 1985 level. The authorization does provide for the opening of the new Carson City campus to assist in meeting the training needs of firefighters. It also provides for the continuation of all other programs.

Mr. Chairman, this concludes my statement. We will be happy to respond to any questions you or the other members of the subcommittee may have.

[The prepared statement of Mr. Donovan follows:]

STATEMENT OF

CLYDE A. BRAGDON, JR.

ADMINISTRATOR

UNITED STATES FIRE ADMINISTRATION

AND ACTING ADMINISTRATOR OF

THE TRAINING AND FIRE PROGRAMS DIRECTORATE

BEFORE THE

SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY

COMMITTEE ON SCIENCE AND TECHNOLOGY

HOUSE OF REPRESENTATIVES

MARCH 21, 1985

I am Joseph L. Donovan, Superintendent of the National Fire Academy (NFA) in the Federal Emergency Management Agency (FEMA). Today I am representing Clyde A. Bragdon, Jr., Administrator of the United States Fire Administration (USFA), and the Acting Associate Director of FEMA's Training and Fire Programs Directorate.

As you know, Mr. Bragdon suffered a heart attack several weeks ago and is therefore unable to be here today. He continues to make a steady recovery and is resting at his home in Frederick, Maryland. It appears that his recovery is within the bounds his doctors hoped for and his recovery and recuperation period will take about two months.

With me is Mr. Edward M. Wall, the Acting Administrator of the U.S. Fire Administration. He will join me in answering the Committee's questions.

Mr. Chairman, fire is a serious problem in the United States. Every single day in newspapers and on radio and television our senses are heightened by accounts of the ravages of fire and the tragedy of those affected by fire. Your committee today will consider the Administration's request to reauthorize appropriations for the activities of the Federal Fire Prevention and Control Act, Public Law 93-498, and I am pleased to have this opportunity to appear before your Subcommittee, Mr. Chairman, to justify this request.

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the ultimate solution to the fire loss problem resides at the local level. We, therefore, will continue to offer support that will build capacity at the local level to deal with that realization. We are fortunate to have available a network of over one million paid and volunteer fire service people who, through their local departments, form the nucleus of support to accomplish the mission we have. That support and donated time is essential as we strive together to reduce fire losses.

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USFA works to accomplish this goal through programs and research and applied engineering projects; NFA through training and education.

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The first step in solving any problem is understanding the cause. By collecting and analyzing state and local fire data through the National Fire Incident Reporting System (NFIRS), USFA staff pinpoints how many people are affected by fire, what areas of the country have the highest risks, what age and economic groups are most seriously threatened, and what types of factors cause the majority of fires. Armed with this information, USFA is able to devise programs to put their resources to work in the areas of greatest risk.

The priority areas identified are:

-- residential fires
-- arson
-- firefighter health and safety
-- fire service multiagency operations
-- fire service management efficiency

Today we would like to focus on what USFA is doing in the most critical need area, residential fires.

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The Partnerships Against Fire program is precisely that type of program. Started in 1984, it is built around the concept of total community involvement. The various elements of the community share not just the responsibilities but the benefits as well. Thirty pilot programs were established in 10 states last year. Just last month, 10 more states were added, along with the District of Columbia.

Fire problems vary from community to community and no single effort can be tailored to meet the needs of every community. An important feature of this program is that the particular needs of the

community are identified and fire safety measures fashioned to meet the needs of the community. There are three overall objectives in the Partnerships Against Fire program:

1. Increased awareness of the fire problem by the community participants: its citizens, business, volunteers and government leaders.

2. Strengthening of existing fire programs and creation of new ones

3. Involvement of community volunteers as the cohesive agents through which the program works.

We point with pride to the first 30 programs some of which are up and operating. Let me illustrate how these work. In the State of Pennsylvania, the Museum of Scientific Discovery in Harrisburg was selected to set up an urban fire safety program. The Museum staff developed a computer project to educate children about fire and smoke spread in the home. The program provides each child with a personalized fire escape plan that can be taken home, discussed and practiced. In addition, a room is being designed in the Museum where actual escapes can be practiced.

The beauty of these community programs is that they can be expanded, modified and transferred to other communities with similar fire problems. It is an example of a local problem being solved at the

local level with local involvement. We believe self-help is a key to federal/state/local relationships. Government cannot and should not do it all.

The second major initiative underway in the residential fire area is the advancement and use of quick acting residential sprinklers. It would be naive to think that all fires can and will be prevented. Therefore, we need to develop programs to protect our citizens, our homes and our property. Smoke detectors, a major program thrust of USFA for many years, have contributed to the saving of countless lives. But they only warn of the danger; they do not stop it.

We are now achieving technological improvements in fire protection and prevention that were not even considered a decade ago. These advances make fire safety in the home more feasible and practical than ever before. For example, quick acting residential sprinkler systems can be installed for less than a dollar per square foot, a very small price to pay for fire and life safety. Depending on the heat spread and other factors, most quick acting residential sprinkler heads will activate in 30-90 seconds after ignition, well before the fire department can respond.

In order for a builder or owner to make an informed decision on using the new quick acting residential sprinkler system, it is necessary to know the cost/benefit ratio. Currently USFA has a project underway with the National Association of Homebuilders to look at cost/benefit analysis. The results of this

effort, we believe, will be to encourage builders, developers and owners to include sprinkler systems in their construction and design. With more than one million housing starts a year, we know that quick acting residential sprinklers in every home will not happen today or tomorrow. Retrofitting existing dwellings will be a large task, also. But we now have the technology to start building residences for a fire safe America.
Working in concert with other fire safety programs, residential sprinklers could be the breakthrough we have been searching for to save lives and reduce fire losses.

To increase public awareness, USFA is retrofitting 20 mobile home trailers with quick acting residential sprinkler systems to demonstrate their effectiveness. Designed to simulate typical living areas, these trailers will be located around the country and will be available for public demonstrations. We would encourage any member of the Subcommittee to observe one of these sprinkler demonstrations. As you observed last year, Mr.Chairman, the fire is set, the flames appear, the sprinkler goes off and the fire is extinguished, usually before the smoke detector has even sounded.

There are a number of other efforts underway in the residential fire area that include Juvenille Firesetter Counseling and the Sesame Street Fire Safety Program.

USFA has numerous programs in the four other problem areas we identified earlier: arson, firefighter health and safety, fire

service multi-agency operations and fire service management efficiency. In the interest of time, we ask that a listing of these programs be made a part of the record.

Now Mr. Chairman, we would like to turn to the current programs and plans for the National Fire Academy, located at the National Emergency Training Center in Emmitsburg, Maryland. .

The Federal government purchased the site for the now National Emergency Training Center in the Spring of 1979 and the first NFA classes were held in January 1980. This is a remarkable accomplishment when one realizes that the staff was able to develop curricula, hire faculty, provide student facilities and deliver advanced training programs without precedent in a few short months.

In just five years of operation at the Emmitsburg campus, over 30,000 students from every state in the Union have been trained in a variety of courses created to advance the professional development of fire service personnel and of other persons engaged in fire prevention and control activities. In these five years the NFA has gained a national reputation as an institution of excellence, whose courses are eagerly sought by students desirous of improving their abilities and enhancing their potential to impact on our Nation's fire problem. In addition to the "on campus" courses,over 90,000 students have attended courses developed by the NFA and delivered in every State throughout the country. These courses have been supplemented by courses where NFA trains state and local trainers

who in turn take the courses and train their own local personnel. Over 40,000 state and local fire service personnel have been trained by these trainers since the program began in June of 1982. Another training opportunity, referred to as our "open learning" program, provides fire service personnel the opportunity to continue educational opportunities at the upper college level that can result in a baccalaureate degree in a fire service curriculum. 5000 students have availed themselves of this opportunity.

In Fiscal Year 1984, the Academy was responsible for the delivery of 1,841 course offerings to 56,324 students, generating 1,268,435 hours of training activity throughout the United States.

In our organization we have two units, our Resident Programs Division and our Field Programs Division. The Resident Programs Division in Fiscal Year 1984 was responsible for coordinating 163 individual on-campus and 23 off-campus offerings of 34 different programs for 10,635 participants and generating 401,012 student hours of activity. Our Field Programs Division was responsible for coordinating 1600 individual off-campus offerings and 55 on-campus offerings of 35 different programs for 45,689 participants generating 725,952 student hours of activity.

The cost of these programs are shared among the Federal government, state and local governments, the individual students and, in some cases, by the private sector. The total Federal cost for this program in FY 1984 was $10,700,000. Our courses are continually

updated with the infusion of new technology and information, and new courses are added each year to our curriculum. We are proud of our new Master Curriculum Plan which defines the field of firefighter safety and professional development from top to bottom. It is structured to allow fullest growth and learning potential at each level - Executive Fire Officer, Command and Staff, Fire Service Technical Specialist and Line Officer.

We are particularly proud of our Executive Development course, an intensive two-week program for top-level fire officers which provides opportunities to expand their managerial effectiveness. Although only offered for the last three years, graduates already have moved to the top fire service positions in Seattle, Houston, Fort Worth, Philadelphia, Chicago, Palm Beach, and other cities. We are also using the latest training techniques and technology to reach students across the nation. For example, through a teleconference network we presented a course on "The Use of Microcomputers in Fire Service Management" with over 4000 participants.

Because of our conviction that effective delivery of public services in an era of shrinking resources requires a conscious investment aimed at enhancing the quality of management in the public sector, the NFA and the USFA have entered into an agreement with Harvard University that permits five senior fire service executives to participate in the John F. Kennedy School of Government, at Harvard, each summer. This prestigious opportunity is another example of the emphasis we are placing on assisting the senior fire official to

deal with the increasingly difficult task of delivery of an effective and efficient public service in a very competitive environment.

NFA courses are accredited through the American Council on Education and NFA credits can be transferred to a degree program.

We are most concerned with our inability to accept all student applications for course admission. Unfortunately, our facility is not large enough to accommodate all the qualified applicants we receive and we must operate on a "first come, first served" basis. In 1984, we had turned down 4,783 applicants. This year, for instance, in just two hazardous materials courses, over 700 qualified applicants had to be turned away. In the fire arson investigation course , which includes both law enforcement and fire personnel, nearly 400 applicants had to be rejected due to space limitations.

Because of the our limited capability, the Congress has approved expanding development of our facility in a western campus in Carson City, Nevada. The opening of this new campus, now planned for mid-summer 1985, will compliment our existing campus in Emmitsburg, Maryland. The NETC site will continue to be the prime location for course development and the Executive Fire Officer and Command and Staff Programs that require the national perspective and interaction for which the Academy has become known.

We appear before this committee proud of our accomplishments and with a positive spirit in reporting this Administration's response to the mandates of the Federal Fire Prevention and Control Act. However, Mr. Chairman, we cannot delude you or the citizens of this country with the suggestion that the national fire problem has been solved. Although there has been a significant reduction in the number of fire deaths, the enormous losses are still unacceptable. These fire losses cannot be ignored by a Nation concerned for the welfare of its citizens. There is a great spirit of public service and dedication among the Nation's firefighters and the many citizens who dedicate their time, lives, and energies for the common good. We pledge our comprehensive and committed efforts to take positive actions that contribute towards a national goal to stop "America Burning".

We, therefore, respectfully request the authorization of appropriations in the amount of $19,322,000 for activities under the Federal Fire Prevention and Control Act of 1974. This authorization request is consistent with the President's budget and freezes most programs at the 1985 level. The authorization does provide for the opening of the new Carson City campus to assist in meeting the training needs of firefighters. It also provides for the continuation of all other programs.

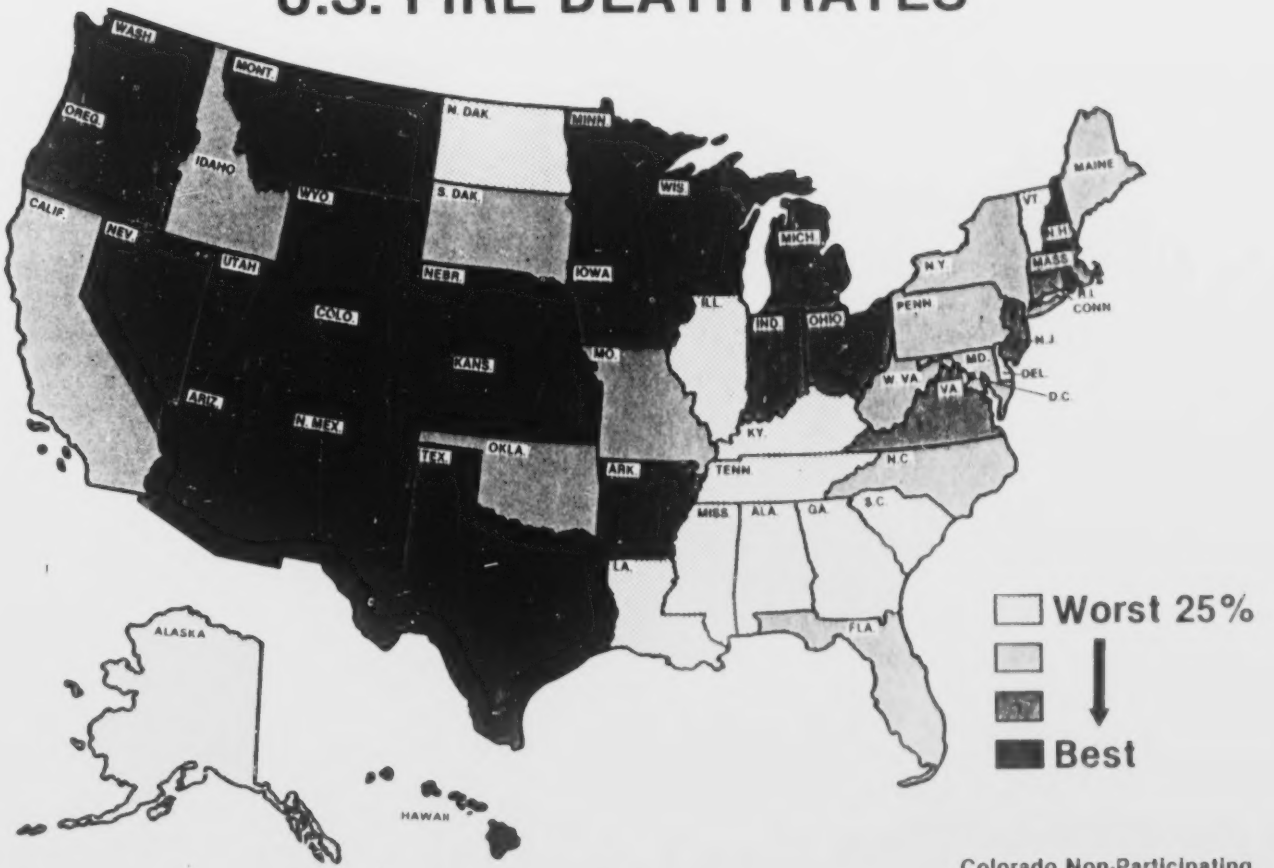
Mr. Chairman, this concludes my statement. We will be happy to respond to any questions you or the other members of the Subcommittee may have.

THE FIRE PROBLEMS IN THE UNITED STATES

2,300,000	Fires
6,000	Deaths
135,000	Injuries
$6,600,000,000	Property Loss

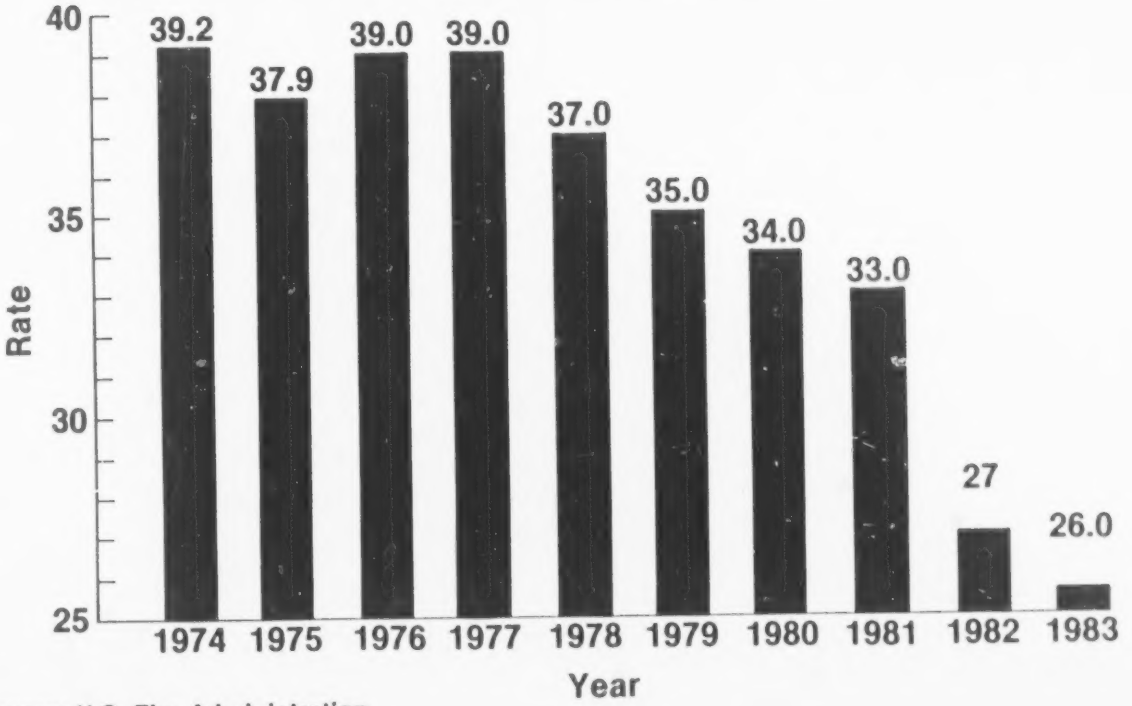
Source: NFPA Estimates for 1983

U.S. FIRE DEATH RATES



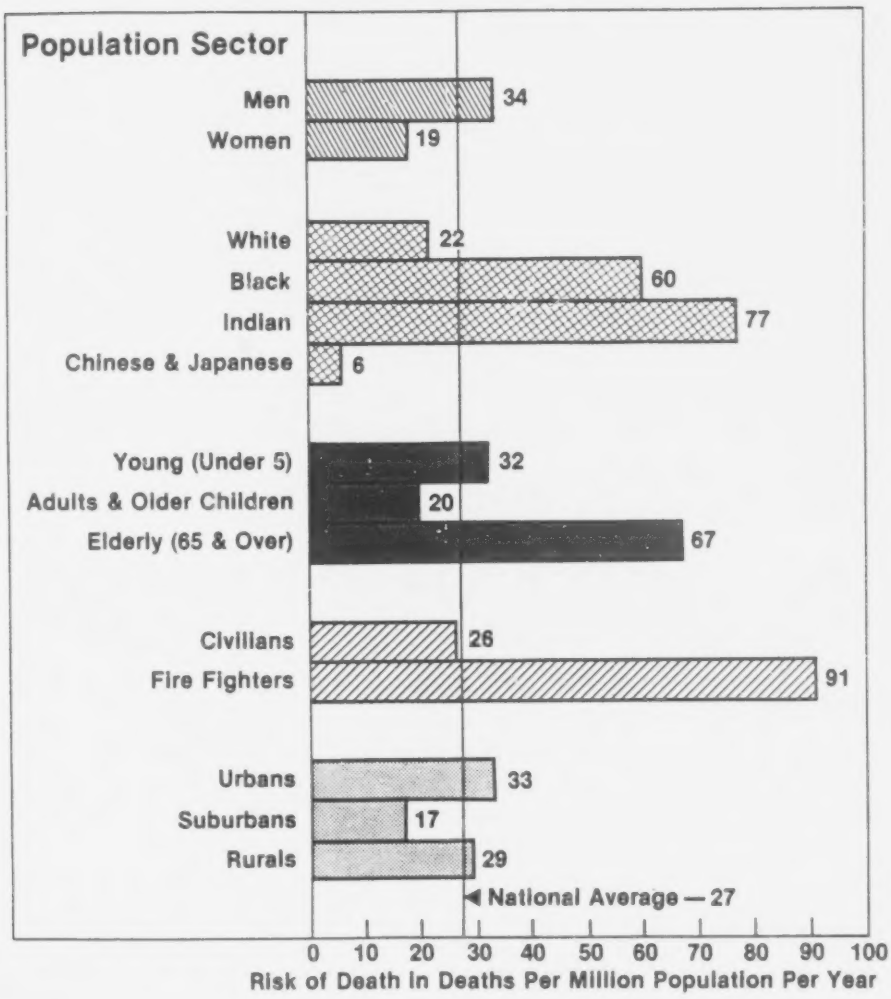
Colorado Non-Participating

U.S. FIRE DEATH RATES PER MILLION POPULATION



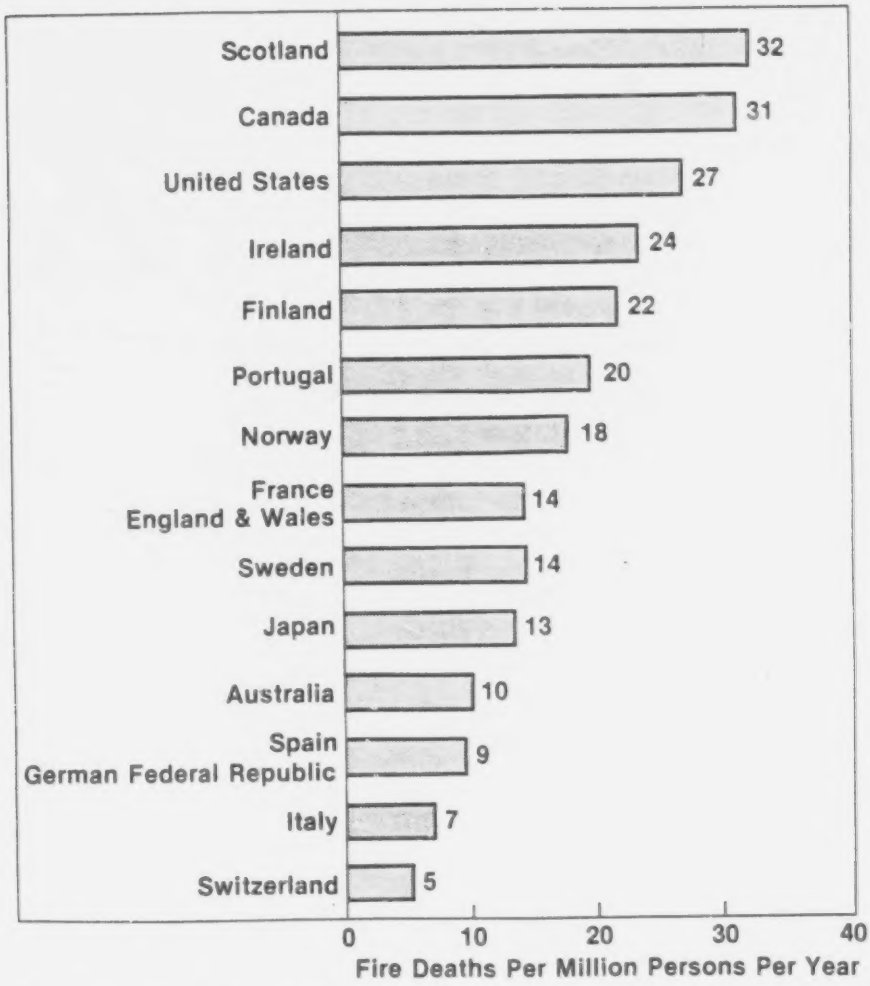
Source: U.S. Fire Administration

THE UNEVEN RISK OF DEATH BY FIRE



Source: U.S. Fire Administration 1983

FIRE DEATH RATES OF DEVELOPED NATIONS RISK OF DEATH BY FIRE —



Source: World Health Organization, 1982

NATIONAL FIRE INCIDENT REPORTING SYSTEM (NFIRS) 1985

USFA OVERVIEW
FIVE PROBLEM AREAS

- Residential Fires
- F/F Health and Safety
- Fire Service Management Efficiency
- Arson
- Fire Service Multi-Agency Operations

USFA INITIATIVES

Residential Fire Problems

- Community Volunteer
- Residential Sprinkler
- Data Collection, Analysis
- Data Utilization
- Public Education & Awareness

Firefighter Health and Safety

- Equipment Studies
- Training/Awareness
- Health Studies
- Safety Studies
- Data Collection and Analysis

45-946 O—85——3

USFA INITIATIVES
(CONTINUED)

Management Efficiency

- Leadership Capacity Building
- Data Utilization
- Alternative Fire Service Delivery
- Private Sector Initiatives
- Public Education and Awareness

Arson

- Community Anti-Arson
- AIMS
- Data Collection and Analysis
- Juvenile Firesetters
- Public Education and Awareness

USFA INITIATIVES
(CONTINUED)

Fire Service Multi-Agency Operations

- Regional Operations
- IEMS
- Data Analysis and Utilization
- Federal/State Agency Coordination
- Public Education and Awareness

COMMUNITY-BASED PROGRAMS

FEMA — USFA

ANTI - ARSON CBO'S

New Britain, Conn.	Bronx, N.Y.
Orlando, Fla.	New York, N.Y.
Boston, Mass.	Cleveland, Oh.
Springfield, Mass.	Philadelphia, Penn.
Holyoke, Mass.	Providence, R.I.
Brooklyn, N.Y. (2)	

Mr. LUNDINE. Thank you, Mr. Donovan. Let's start out where you finished up. You said that you're going to spend the same amount of money as last year, but you're going to be able to open the new Carson City campus.

Do your budget proposals take into account the need for additional full-time staff program funds, travel expenditures and so on, for this NETC west, and if so, where is that money coming from? I mean, what's being deleted in order to accommodate it?

Mr. DONOVAN. In the 1985 budget, the Fire Academy had a line item of $1,500,000, of which $967,000 was for NETC west site administration and the balance was for adjunct faculty and student stipends.

The Emergency Management Institute had a similar type of appropriation, which was not by line item, in their civil defense authorization—in their civil defense appropriation which amounted to a little more than $2 million that they've put into the NETC west.

This year's budget under the Emergency Management Institute includes ten FTE's a full-time professional staff to man the NETC west campus, augmented by adjuncts.

Mr. LUNDINE. Under the 1986 budget proposal of FEMA, as I understand it, the regional offices would be reduced from 10 to 6. Would that proposal affect outreach and dissemination of programs at the National Fire Academy or the U.S. Fire Administration?

Mr. DONOVAN. I'll speak for the Fire Academy and let Mr. Wall speak for the Fire Administration. The field programs in the National Fire Academy are coordinated and run through our field program coordinators right on campus at Emmitsburg. We have a field program division under a deputy superintendent who is a GS-15. He has senior field program coordinators who are responsible for different regions within the country, and they coordinate with the State and metropolitan fire departments for delivery.

Mr. WALL. At present there are 10 people serving in the regions as fire representatives. If it was consolidated into a fewer number of regions, it would have very little effect on us providing the same number of fire reps were present.

Mr. LUNDINE. Do either of you know how they'll make the decisions which regions will be eliminated and how they will serve the constituencies that were previously served by those that are eliminated?

Mr. WALL. There is a task force working on that under the direction of Mr. Gerry Martin. I have no personal knowledge of it, sir.

Mr. LUNDINE. In your judgment, then, the fiscal year 1986 budget will provide enough full-time staff and travel funds to successfully manage and oversee your programs, is that right?

Mr. WALL. Pardon me?

Mr. LUNDINE. The budget request is sufficient to successfully manage and oversee your program.

Mr. WALL. In the Fire Administration, the cutbacks will mean that certain projects that would reach completion sooner would be stretched out over the years, but they will be accomplished. In the case of the community volunteer project, it means that by using the money that we have available and leap-frogging, we'll be able

to cover all 50 States by about 1992. That means the job will be accomplished, but it's going to take a little while longer.

Mr. DONOVAN. As far as the Carson City Campus Fire Academy is concerned, 10 positions are being requested, the National Fire Academy will have three of those to handle the Fire Academy's courses onsite. The NFA plans to run 40 courses out there plus some weekend programs. Two professional staff, plus clerical and technical support will be adequate for the Fire Academy, including travel funds. We have been assured that they have been budgeted for.

Mr. LUNDINE. That was my next question. I had a different understanding. Oh, travel funds for your own staff, but it's my understanding that this stipend program, which pays firefighters travel expenses, has been—is proposed to be eliminated, is that correct?

Mr. DONOVAN. That's correct.

Mr. LUNDINE. What do you think has been the importance of that program, and what will be the effect of its elimination?

Mr. DONOVAN. Well, I was here 3 years ago before Congressman Brown, 2 weeks after I was appointed, and he asked me to look into the future and I said, I wish I had a crystal ball. That's very difficult to answer. I've asked an awful lot of the students and the students up there; you'll get 50 percent of them say it won't effect us at all and 50 percent of them say it's going to really hurt us.

It seems that the volunteers, the people from the volunteer fire departments, the very small fire departments, and the metropolitan fire departments seem to indicate that they're going to have a problem. And the suburban communities, that seem to have the least amount of difficulty with raising taxes, they are the ones that seem to say we'll just budget for travel, so it's a hard one to answer.

Mr. LUNDINE. That was precisely my concern, is that—of course I have a bias representing a lot of volunteer companies, though I must say that in my previous incarnation I was a mayor with a paid department, and I have a lot of respect for the work of the professional firefighter.

And my concern with this elimination is that the very people who probably need the training the most, will probably be denied it because of the elimination.

I have no further questions, and I thank you very much for your contribution to the subcommittee's understanding of these institutions.

Mr. DONOVAN. Thank you, sir.

Mr. WALL. Thank you.

Mr. LUNDINE. Now I'd like to ask if Raymond C. Kammer, Deputy Director of the National Bureau of Standards—and I understand he'll be accompanied by Jack E. Snell, Director for the Center for Fire Research at NBS, would present their testimony.

STATEMENT OF RAYMOND G. KAMMER, DEPUTY DIRECTOR, NATIONAL BUREAU OF STANDARDS, ACCOMPANIED BY JACK E. SNELL, DIRECTOR, CENTER FOR FIRE RESEARCH, NATIONAL BUREAU OF STANDARDS

Mr. KAMMER. Good morning, sir. I'm Ray Kammer; I'm the Deputy Director of the Bureau of Standards and this is Jack Snell; he's the Director of the Center for Fire Research at the Bureau of Standards. I'm here today to discuss the fire research activities of NBS, and of course these activities are all conducted in the Center for Fire Research.

The proposed NBS budget for fiscal year 1986 includes some rather large program changes. They amount to about $33 million in total in a budget of $120 million. We have about $16.5 million in increases and we have about $16.5 million in decreases. One of the decreases proposed is the termination of the Center for Fire Research.

This action's included in the President's budget for two reasons. First of all, to allow NBS to undertake new programs addressing critical new technologies without increasing our budget, and second, to implement the Administration's policy of disengaging the Federal Government from areas where State and local government has primary responsibility. Fire prevention and protection have traditionally been within the purview of State and local government and, therefore, we propose the termination of this Center.

This concludes my formal statement, sir.

[The prepared statement of Mr. Kammer follows:]

U.S. DEPARTMENT OF COMMERCE
STATEMENT OF RAYMOND G. KAMMER, DEPUTY DIRECTOR
NATIONAL BUREAU OF STANDARDS
BEFORE THE SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY
HOUSE COMMITTEE ON SCIENCE AND TECHNOLOGY
ON REAUTHORIZATION OF THE FEDERAL FIRE PREVENTION
AND CONTROL ACT OF 1974

MARCH 21, 1985

I am here to discuss the fire research activities of the National Bureau of Standards (NBS). These activities are conducted in the Center for Fire Research (CFR).

Fiscal year 1986 budget

The proposed NBS budget for fiscal year 1986 includes program changes of $33M in a budget of $120M -- $16.4M in increases and $16.5M in decreases. One of the decreases proposed is the termination of the Center for Fire Research. This action is included in the President's budget for two reasons:

- To allow NBS to undertake new programs addressing critical new technologies with greater economic potential to the U.S. without increasing the NBS budget.

- To implement the Administration's policy of disengaging the Federal Government from areas in which State and local governments have primary responsibility. Fire prevention and protection have traditionally been within the purview of state and local governments.

This concludes my formal statement. I will be pleased to answer any questions you may have.

RAYMOND G. KAMMER

Deputy Director, National Bureau of Standards

Raymond G. Kammer became the Deputy Director of the National Bureau of Standards on September 14, 1980.

NBS is the Nation's central reference laboratory, providing measurement methods, standards, and data that are used in industry, commerce, government, and universities. Bureau headquarters are located in Gaithersburg, Maryland, with a second laboratory at Boulder, Colorado.

As Deputy Director, Mr. Kammer is responsible for the efficient execution of the Bureau's operational programs. He coordinates, monitors, and assesses progress of all NBS technical projects, and of the supporting services.

Mr. Kammer joined NBS in 1969 as a management intern and program analyst. From 1971 to 1974 he served as program and budget analyst at the Department of Commerce. Returning to NBS as senior budget analyst, he subsequently served as senior program analyst, Associate Director for Programs, Budget, and Finance, and Director of Administration and Information Systems.

From April 1983 until September 1983, Mr. Kammer served as Chairman of the Source Evaluation Board for Civil Space Remote Sensing. He was also responsible for developing the Department of Commerce position and program for Space Industries. He is currently representing the Department of Commerce in establishing the Cabinet Council Working Group on Space Commercialization.

Mr. Kammer received a Bachelor of Arts degree from the University of Maryland in 1969.

Mr. LUNDINE. Are you telling us that you believe that all the necessary research that's been done under your department can be performed by State and local authorities?

Mr. KAMMER. Well, I don't imagine that the State and local authorities would perform it themselves necessarily, but there are quite a few universities that have active fire programs, some 30, and it seems reasonable that the State and local governments could have recourse to these universities.

Mr. LUNDINE. And that those universities can do the same thing that the Center for Fire Research was doing essentially?

Mr. KAMMER. In time I believe that is possible, yes, sir.

Mr. LUNDINE. Isn't there a question of a lack of coordination when you have research reassigned, if you will, to disparate sites and no coordination?

Mr. KAMMER. It's quite possible that there could be problems of coordination, at least initially, but you have—there's another issue to keep in mind, or at least we believe should be kept in mind, and that has to do with trying to keep the budget under some kind of control and that means reducing some Federal programs.

Mr. LUNDINE. Well, I think that most Representatives have the budget very much in—expenditure limitations very much in their mind. I can't speak for other Representatives, but speaking for myself, I think, though, that there are a lot of questions of priorities that I find strange.

In other words, if the fundamental justification that you're giving to do away with this research, or this research center, is that State and local governments do it, what good does that do the taxpayer? I mean, ultimately we're supposed to be serving the same people. And if it is an unnecessary duplication, then I'll be the first one to want to cut it. I don't sense that that's true in this case, that it's duplicating anything that's going on at the State or local level, and I think this is just frankly a copout—you know, you're told to cutout something, so you cut this out. I just—it doesn't seem to help the taxpayer any if you make the assumption that this was necessary research that somebody else is going to have to go spend the money to do it.

Mr. KAMMER. Well it does make the option more of a local option and presumably more responsive to regional differences, regional needs, however.

Mr. LUNDINE. And you don't think that the Center has been sufficiently cognizant of regional needs or that it's too difficult for one center to be?

Mr. KAMMER. Well, I don't think that any decision that's reached on a national consensus is going to be a perfect fit for every region. I didn't mean to imply, however, that the Center hasn't done good work. I'd be very unwilling to suggest that. I think they've done an excellent job.

Mr. LUNDINE. What is the importance of fire hazard modelling?

Mr. KAMMER. Well, the concept is currently if you want to assess the danger of perhaps a piece of furniture or a certain way of constructing a building, the traditional way of assessing that is to build the thing and then burn it. It's very expensive; it gives you unique information. It told you exactly what you needed to know about that particular artifact, but it doesn't give you a very gener-

alizable picture of what you might want to do to set a fire code, say for a municipal area.

If you can reduce the phenomena that are going on to scientific fact, you can then assess unique situations using these facts and come to an answer that's very satisfying without the expense, which can be enormous sometimes.

Mr. LUNDINE. How far have we gone toward the development of a reliable computer model that can predict the spread of fire, smoke, toxic gases, through all parts of a building?

Mr. KAMMER. We have a number of the fundamentals in hand now, and it is possible to make predictions about the effect of burning a particular artifact, for example, an upholstered piece of furniture on the rest of the building, how the smoke might spread.

Mr. LUNDINE. It would seem that that's the exciting part of it. My limited understanding of a computer model is that you can pull out one aspect and then run it again and try to figure out how important that individual item is.

Mr. KAMMER. That's very correct, sir. And also you can imagine, then, strategies for stopping what you regard as the bad effect. Do you want to worry about ignition, do you want to control the spread of smoke, maybe put fire doors in, change the ventilation system?

Mr. LUNDINE. And this model has been developed at the Center for Fire Research?

Mr. KAMMER. Both at the Center and at a number of universities. Perhaps Dr. Snell could respond in more particular.

Mr. LUNDINE. I would appreciate that, Dr. Snell.

Mr. SNELL. Thank you, sir. Perhaps the greatest note most recently is the development of what we call FAST, this fire and smoke transport model, which predicts the consequences to life safety of prescribed fires in a specified building. This provides us, in fires, something analogous to the capability to predict lift and drag in aeronautical engineering. If we couldn't do that in the latter case, we'd be ill-equipped to design and develop improved aircraft, and so is the case in fire protection design and fire safety. Without this capability to predict, we're lost.

Just as an indication of the interest this model had created, just yesterday we had a scientist from Owens-Corning Fiberglas come in to work with us in learning to use this model in their industry. Last week, Chief Brunassini of Phoenix, one of the most progressive fire departments in the country, came to look at this model for adaptation and use in fire fighting tactics at the fire scene in his department. And a couple of weeks earlier, the Deputy Chief of Los Angeles came in to look at the use of this predictive model in training and other applications in their city.

Last year we ran about 30 validation tests of this model, and we're in the process now of developing the first multi-story version of this model. In the summer we'll complete development of facilities for validation testing of that multi-story model.

Mr. LUNDINE. If your Center is eliminated, have any plans been made for what's going to happen with this model?

Mr. SNELL. No, sir.

Mr. KAMMER. The universities I alluded to earlier, and there are some 30 that are involved in various forms of fire research, a

number of them are very cognizant of these modeling approaches and have also been doing work in this area.

Mr. LUNDINE. So the idea would be turn the model that is now at the Center over to one of the universities or more——

Mr. KAMMER. That is what we would try to do, yes, sir.

Mr. LUNDINE. Well, I appreciate your testimony and I appreciate that you may have been under some difficulty here this morning, and I don't want my irritation with priorities to extend to you personally. I want you to understand that. Thank you very much for your testimony.

I would like to now call a panel of witnesses including Howard Boyd, of the Joint Council of National Fire Service Organizations; John Gerard, Washington representative for the National Fire Protection Association; Warren Isman, fire chief of Fairfax County Virginia; James Monihan, National Volunteer Fire Council; Harold Schaitberger, director of government affairs for the International Association of Fire Fighters; and Romeo Spaulding, International Association of Black Professional Firefighters.

We've got the Capitol area and the Delmarva area well represented here this morning, I see.

Mr. Boyd, would you proceed first? Incidentally, I did not state earlier, with respect to earlier witnesses, but those of you who have submitted written testimony, the entire testimony will be made a part of the record. If you should choose to summarize it, your entire written statement will be made a part of the record.

Mr. Boyd.

STATEMENT OF HOWARD D. BOYD, CHAIRMAN, JOINT COUNCIL OF NATIONAL FIRE SERVICE ORGANIZATIONS

Mr. BOYD. My name is Howard Boyd and I'm currently serving as president of the Joint Council of Fire Service Organizations. I will summarize this testimony in view of the constraints of time, and simply state that the Joint Council of Fire Service Organizations is the voice of the fire service in America. It is a collective voice, it is a voice that is speaking for more than 2 million people in the fire service, the greater part of whom are volunteers.

I'd like to read from some of the material that has been developed. The FEMA officials are learning more about the Nation's fire problem and the need to provide cost effective fire related programs to keep life and property loss from escalating. We believe that FEMA is to be commended for the increased personal attention to fire programs and the improved recognition of the visibility of the fire programs within the Federal Emergency Management Agency. Recognition must also be given to the efforts to establish an amicable and an effective communication network between the fire service and the leaders of the FEMA officials.

We're not going to present any evidence as far as the facts and figures; those are available from many of the others. We'd only say that the major thrust of the Joint Council's efforts during the most recent past was devoted toward helping to reestablish the program priorities for the U.S. Fire Administration, and the working relationship with the National Fire Academy to be continued.

The statistics for the Academy will not be presented. You have already heard some of those, but they're available for your committee. And we would make note, that the successful delivery of the quality courses, both on campus and in the field, is causing a major admissions problem resulting in a large majority of applications received being rejected because of classes filling up nearly a year in advance.

I believe that we cannot overemphasize the importance of what the U.S. Fire Academy has done in the reduction of the incident and the severity of fire, the saving of life in America since its inception. This is furnishing a body of information and a level of training that is available nowhere else in America. It's doing a magnificent job, and we respectfully request that the budget be given as those that we have enclosed with support for the administration, support for the National Fire Academy, and especially that the student stipend program be authorized at 100 percent.

We feel that if the students are not supplied with the transportion, that it's going to work a hardship upon so many of those volunteers who are willing to give of their time, of their ability, and many times of their lives. And all they're asking for is to help in their training, that they may be more proficient in saving the lives of the men and the women and the children who have been entrusted to them in their communities.

So on behalf of the joint council, I would thank you for the opportunity to present this testimony, and we request the figures that we have be included in our testimony.

[The prepared statement of Mr. Boyd follows:]

STATEMENT OF

HOWARD BOYD, CHAIRMAN

JOINT COUNCIL OF NATIONAL FIRE SERVICE ORGANIZATIONS

IN SUPPORT OF THE REAUTHORIZATION

OF THE

UNITED STATES FIRE ADMINISTRATION

BEFORE THE

SUBCOMMITTEE ON SCIENCE, RESEARCH & TECHNOLOGY

OF THE HOUSE COMMITTEE ON SCIENCE & TECHNOLOGY

MARCH 21, 1985

Mr. Chairman:

My name is Howard Boyd. I am currently serving as the chairman of the Joint Concil of National Fire Service Organizations.

As chairman of the Joint Concil it is indeed a pleasure to submit testimony in support of the reauthorization of the United States Fire Admininstration and National Fire Academy within the Federal Emergency Management Agency and the Center for Fire Research. This testimony is presented on behalf of the eleven member organizations of the Joint Council as listed herein:

Fire Marshals Association of North America
International Association of Arson Investigators
International Association of Fire Chiefs
International Association of Fire Fighters
International Fire Service Training Association
International Municipal Signal Association
International Society of Fire Service Instructors
Metro Chiefs of the International Asssociation of Fire Chiefs
International Association of Black Professional Fire Fighters
National Fire Protection Association
National Volunteer Fire Council

Prior appearances before authorization committees were not as harmonious as this hearing is expected to be. You are to be commended Mr. Chairman for inviting the Joint Council representatives, FEMA, and CFR officials to sit at the same table during this important hearing. We believe this exemplifies the spirit of cooperation that has been developed between FEMA and the fire service during the past twelve months.

As each day passed FEMA officials learn more about the nation's fire problem and the need to provide cost effective fire related programs to keep life and property loss from escalating. FEMA is to be commended for increasingly personal attention to the fire program and the improved recognition and visibility of the fire programs within the Federal Emergency Management Agency. Recognition must also be given to the efforts in establishing an amicable and effective communication network between the fire service leaders and the FEMA officials.

I will not present to you as part of this testimony the facts and figures about life loss, property loss and the magnitude of the injury problem caused by fire. These statistics have been presented at previous hearings or covered in testimony presented by other members of the Joint Council team, and are available to you. These statistics represent the past. Instead, this testimony will reflect the present and the future.

The United States Fire Administration within the Federal Emergency Management Agency is divided into four offices: Fire Policy and Coordination; Firefighter Health and Safety; Fire Prevention and Arson Control; and Fire Data and Analysis. The Government Affairs Committee, (GAC), of the Joint Council worked verty closely with the USFA to establish priorities for each of these program areas and help guide the allocation of resources towards the primary mission of improving fire safety in the United States. Although the role of GAC was advisory in nature, FEMA officials were genuinely interested, coopertative and responsibe to the many suggestions offered.

While the major thrust of the Joint Council's efforts during the most recent past were devoted towards helping to re-establishing the program priorities for the United States Fire Administration, the working relationship with the National Fire Academy continued.

Statistics for the National Fire Academy will not be presented as part of this testimony. They, too, are available to your committee if desired. However, note should be made that the successful delivery of quality courses both on campus and in the field is causing a major admissions problem resulting in a large majority of applications received being rejected because of classes filling up nearly a year in advance.

While the fire programs (USFA and NFA) are both effective and cost effective, they still lack the personnel and financial resources necessary to meet the needs of the fire service and to make the desired impact on the nation's fire problem.

While the Joint Council of National Fire Service Organizations recognizes the spirit of the President and the Congress as it relates to freezes and reductions they feel the fire service has practiced austerity since the inception of the federal fire focus. Therefore the Joint Council recommendations for FY 86 & 87 authorizations are:

The United States Fire Administration	
Fiscal Year 1986	12,000,000 30 FTE's
Fiscal Year 1987	15,000,000 40 FTE's
The National Fire Academy	
Fiscal Year 1986	16,500,000 100 FTE's
Fiscal Year 1987	20,000,000 125 FTE's

In addition we request the committee authorization to include:

The student stipend program be authorized at 100%.

The Joint Council is also aware of the important work being conducted by the Center for Fire Research at the National Bureau of Standards and supports the position that the Center for Fire Research of the National Bureau of Standards be authorized and level funded within the Department of Commerce for FY'84 so long as the funding in no way reduces the recommended funding of any other federally funded fire program.

The requested authorization for the Center for Fire Research is as follows:

Fiscal Year 1986	8,000,000 40 FTE's
Fiscal Year 1987	10,000,000 50 FTE's

On behalf of the Joint Concil I thank you for the opportunity to present testimony.

Mr. LUNDINE. Thank you very much. Mr. Gerard?

STATEMENT OF JOHN C. GERARD, WASHINGTON REPRESENTATIVE, NATIONAL FIRE PROTECTION ASSOCIATION

Mr. GERARD. Thank you, Mr. Lundine. I'm John Gerard representing the National Fire Protection Association. The NFPA has been around for about 96 years now, and during that entire time we've been one of the most vocal advocates for public fire safety. The NFPA worked very hard to help establish the Fire Administration, and each year from that beginning more than 10 years ago, we've been visible, we've been vocal and we've been supportive of both the Fire Administration and the Fire Academy and the work that they do.

Over the past 10 years, both of these organizations have been supportive of initiatives and activities on many fronts to deal with the fire problem in this country. Just one of those activities that the Fire Administration's been working on has been public awareness. The public awareness programs and initiatives that they've been supporting are beginning to pay big dividends.

Mr. Schaenman talked about the life loss. The life loss last year in the United States for the first time since anyone's been keeping statistics went below 6,000. The first time. The program is working. It's working. It seems foolish to begin to prune a tree once the fruit is on the tree and you're beginning to harvest the fruit. I think that's foolish to do that at that time.

The NFPA is equally encouraged by the quality of the programs at the Fire Academy. It is our very firm belief that eliminating the student stipend will, in effect, close the Fire Academy. We believe very strongly and recommend in the strongest possible way that the student stipend program at the Fire Academy be reinstated. Previous witnesses have reviewed the value of the Fire Administration and the Fire Academy programs, and I won't go into that right now.

And finally, NFPA would very much like to express its concern for the continued funding for the Center for Fire Research. I have to confess, Mr. Lundine, I almost fell out of my chair at the testimony we just heard from the previous panel. If what you heard was scientific, I think that scientist was probably lost in the cargo bay of the space Shuttle for the past few years. I cannot believe that that's a realistic approach to the Center for Fire Research.

The Center for Fire Research is a miniscule branch of the Bureau of Standards. It's responsible for significant research that has led to the reduction in fire loss in the United States over these past few years; and the dollar loss in the United States in 1983 was over $6 billion. In the next couple of days you're going to be asked to vote on the MX missile. Wouldn't it be nice to have $6 billion in your hip pocket that you could apply to some of those programs? Six billion dollars is a lot of money. It goes up in smoke every year, and the Center for Fire Research does basic research to help reduce that fire loss.

One of the things that they developed over—I guess it's been probably 7 years ago now, they completed research that made the smoke detector a practical reality for the American home. That

came out of the Center for Fire Research. The Center for Fire Research developed a fire safety evaluation system which today makes it possible for hospitals to use a model for fire safety evaluation that can improve fire and life safety in a hospital without bankrupting the hospital. We're all concerned about the cost of health care. Some of the basic research coming out of the Center for Fire Research does, in fact, reduce the cost of health care in the United States. There are a lot of payoffs that go beyond simply reducing fire loss.

I think that the Center for Fire Research is an extremely valuable asset to the United States. Right now the Center for Fire Research is the pivotal and key agency involved in the research going on to develop a fire-safe cigarette. The cigarette is the single, largest cause of life loss fires in the United States every single year. If the Center for Fire Research does not complete the investigations they have begun and continue to work with the group that the 98th Congress funded, then that's going to go down the tube. And it would seem foolish for the 99th Congress to cancel out what the 98th Congress did. We really believe that the Center for Fire Research funding should be established.

So let me say that your committee, Mr. Chairman, can rest assured that the Fire Administration, the Fire Academy and the Center for Fire Research are three exemplary programs. In a cost benefit analysis, I think you would find that they deliver $10 worth of benefit for every dollar spent. If every agency of the Federal Government could be as exemplary as those three agencies, nobody would be criticizing anything about what goes on in Washington. I think their support is justified and warranted and deserves everyone's strong support.

Thank you.

[The prepared statement of Mr. Gerard follows:]

NATIONAL
FIRE PROTECTION
ASSOCIATION
INTERNATIONAL

FY'86 AUTHORIZATION FOR THE FEDERAL FIRE PREVENTION AND CONTROL ACT

STATEMENT OF

JOHN C. GERARD

NATIONAL FIRE PROTECTION ASSOCIATION

before the

SUBCOMMITTEE ON SCIENCE, RESEARCH AND TECHNOLOGY

COMMITTEE ON SCIENCE AND TECHNOLOGY

U.S. HOUSE OF REPRESENTATIVES

MARCH 21, 1985

The National Fire Protection Association (NFPA), founded in 1896, is a non-profit, technical and educational membership organization. It has remained the principal public advocate for fire safety since its inception. The Association's membership of over 32,000 is drawn from the many disciplines involved in and concerned about the national fire problem. NFPA is not a trade or industry association. No one group or interest is dominant. The only common membership denominator is a concern about fire safety. Members include fire service personnel; fire marshals; electrical inspectors and city managers; architects, engineers and educators; health care facility operators; and similar groups from commerce, industry, insurance; as well as federal, state and local governments. The NFPA is a founding member of the Joint Council of National Fire Service Organizations (JCNFSO).

One of the principal functions of NFPA is the development of more than 200 consensus codes and standards related to fire protection. These codes include among others the Life Safety Code, the National Electrical Code and the National Fuel Gas Code. Typical of the subjects covered by our standards are flammable liquids, sprinkler systems and the installation of other fire protection equipment. We also develop standards used for fire apparatus, firefighter safety and professional qualifications. NFPA has many other functions including public education, technical advisory services, research and development, as well as data collection and analysis.

In its role as public advocate for fire safety, the Association was an active participant in the National Commission on Fire Prevention and Control. That Commission investigated and identified the fire problem in the United States

and made a series of recommendations which we have continuously supported. Two of those recommendations, enacted in 1974, continue to serve this country in an exemplary fashion. They are the United States Fire Administration and the National Fire Academy.

The NFPA has closely monitored the work of these two activities and has provided constructive testimony at authorization and appropriation hearings regarding their goals and accomplishments. Working together they have provided the catalyst and leadership to assist state and local governments, as well as the private sector, in increasingly effective efforts to solve our Nation's fire problem.

Consistent with our dedication to reducing the human and economic losses caused by fire, we have a vital concern over the funding available for the United States Fire Administration and the National Fire Academy. We believe that funding must be provided to maintain an effective Federal focus on fire.

The NFPA worked hard to help establish the United States Fire Administration. Each year, from the very earliest beginnings, over 10 years ago, we have been visible, vocal and supportive of the Fire Administration and its work. Reducing available funds now is unwise, in the extreme. The programs and initiatives of the USFA are beginning to pay dividends. Life loss last year was below 6000 for the first time since records have been kept. This improvement is largely due to efforts, over the past 10 years to improve fire and life safety. This program is working. It costs well under $10 million and to prune it now, when the fruits are being harvested is foolhardy.

NFPA is encouraged by the quality of the programs at the NFA. We recognize, however, that eliminating the student stipend will in effect close the Fire Academy and we recommend in the strongest possible way that the stipend program for the NFA be reinstated.

Finally, we should express our concern for the funding to continue the work of the Center for Fire Research (CFR). This miniscule branch of the National Bureau of Standards is responsible for the research leading to the development of a cost effective smoke detector for the home. The CFR developed the Fire Safety Evaluation System (FSES), the use of which is already saving millions of dollars in hospitals across the Nation, including those in the Veteran's Administration. This evaluation system makes it possible to develop effective, lower cost life safety alternatives in hospitals and like institutions.

The Center is now involved in the scientific studies related to developing a more fire safe cigarette. As you all know, the cigarette is the largest single cause of fatal fires in North America. As a result of action taken in the 98th Congress, we may see that terrible fact change. The only act more terrible would be the 99th Congress denying funds to move ahead with this work.

The Science, Research and Technology Subcommittee, House Committee on Science and Technology, can rest assured that the USFA, the NFA and the CFR are exemplary Federal programs. The ratio of results achieved to dollars spent is truly impressive and is an example for all agencies and departments.

Mr. LUNDINE. Thank you. I just have to comment that it isn't the previous witness' analytical inability, it's the miniscule minds of people down at the Office of Management and Budget that constrain them to testify as they did.

Chief Isman, I must say that for a time I lived in Fairfax County after getting elected to Congress, and it's just sort of a hobby of old mayors to look around at the efficiency of various public services and I marveled at your fire department, I really did. I thought it was from my ability to analyze one of the outstanding organizations that I've seen.

We welcome your testimony.

Mr. ISMAN. Well, thank you very much. I don't know whether I have a swelled head now or not.

Mr. LUNDINE. I didn't have a fire at our house, but I really did observe that it was very efficient.

Mr. ISMAN. Thank you.

STATEMENT OF WARREN E. ISMAN, FIRE CHIEF, FAIRFAX COUNTY, VA, INTERNATIONAL ASSOCIATION OF FIRE CHIEFS

Mr. ISMAN. I am here today, however, representing the International Association of Fire Chiefs. Our organization represents 8,200 career and volunteer fire chiefs who are responsible for managing fire protection services, emergency medical services, airport crash-fire-rescue services, hazardous material control, and all those other emergency responses to disasters of all types in the communities of our Nation.

We have submitted written testimony, Mr. Chairman, and I would like to comment, if I might, just a few minutes on some of the things I have heard this morning, which as Mr. Gerard pointed out, concerned me very, very much.

Mr. LUNDINE. Your entire written testimony will be made a part of the record. If you can summarize, we'd appreciate it.

Mr. ISMAN. Thank you very much. First as a fire chief of a major jurisdiction with over 1,000 career people and 400 volunteers, I feel certainly qualified to talk about the fire problem. In Fairfax County, we experienced somewhere in the excess of 20,000 fire calls last year.

I am concerned because it is necessary for me to train and educate my officers, as well as my firefighters. Some of that we can do very well on the local level. Others, advanced training, administrative support, specialized training in hazardous materials control, cannot come from the local level. It is just impossible.

The National Fire Academy courses have been outstanding. They've been models. I have currently, since January 1, 1985, had over 14 of my fire officers through courses at the National Fire Academy. These are courses that local government could not put on; we do not have the technical expertise to do it on a local level. Even in a department as large as mine we do not have the capability of doing that.

As far as the volunteers are concerned, there are weekend courses at the National Fire Academy, as well as weekend courses sponsored at my own fire training facility. These weekend courses are an important part of the program.

I've also had an opportunity these last several years to do a great deal of traveling with the fire service, and talked to a lot of fire chiefs all over the United States. As a result of that, the National Fire Academy is held in high esteem throughout the United States, both by career and volunteer personnel. These people have indicated without doubt to me, that without the stipend, they will be unable to travel. Within my own organization I am very close and certainly I can afford the cost of travel. But once you leave the Washington metropolitan area, such travel is not possible. In a jurisdiction such as mine with a $46 million budget, I have less than $8,000 total for out-of-state travel. I certainly could not afford that if I lived—if my jurisdiction were further away from Emmitsburg, MD. Without that kind of a stipend, my people would not get the kind of training that is so absolutely essential to protecting the public.

Research. As Mr. Gerard said, I, too, had somewhat incredulous feelings as the Center for Fire Research was discussed. Although I am not a scientist, I have a scientific background and know a little bit about what goes on at the Center for Fire Research. Many of the advancements, which you have been informed about, could not have occurred without that kind of funding.

It is true, it is returned tenfold. There is other research ongoing, too, within the U.S. Fire Administration. There is a program known as "Project Fires," which for the past seven years has worked to improve fire fighter protective clothing. That research project is almost to complete fruition. In Fairfax County, we just placed an order for 1,200 sets of protective clothing based on all of the research which has come out of "Project Fires." That means that that basic research, which certainly could not have been conducted on the local level, will now provide protection from fire for all of my personnel. Absolutely essential.

Statistics. What does one community do in comparison to another? Unless statistics are gathered on a national level, which is done through the U.S. Fire Administration, how do we know where we are? How do we compare? How do our elected officials determine whether or not we, as fire chiefs, are doing the job? And the answer is, it's impossible.

Mr. Chairman, there is no way that we can continue the progress we have made in the last few years, unless these items are restored to the budget.

I certainly thank you for the opportunity to testify.

[The prepared statement of Mr. Isman follows:]

INTERNATIONAL ASSOCIATION OF FIRE CHIEFS • INCORPORATED

TESTIMONY OF

CHIEF WARREN E. ISMAN

OF THE

INTERNATIONAL ASSOCIATION OF FIRE CHIEFS

on

FISCAL YEAR 1986 BUDGET

FOR

THE UNITED STATES FIRE ADMINISTRATION

NATIONAL FIRE ACADEMY

CENTER FOR FIRE RESEARCH

testifying before the

SUBCOMMITTEE ON SCIENCE, RESEARCH, AND TECHNOLOGY

COMMITTEE ON SCIENCE AND TECHNOLOGY

March 21, 1985

STATEMENT

OF

CHIEF WARREN E. ISMAN

FOR THE

INTERNATIONAL ASSOCIATION OF FIRE CHIEFS (I.A.F.C.)

March 21, 1985

I am Chief Warren E. Isman representing the International Association of Fire Chiefs (I.A.F.C.). Our organization represents 8,200 career and volunteer fire chiefs who are responsible for managing fire protection services, emergency medical services, airport crash-fire-rescue services, hazardous material control and all those other emergency responses to disasters of all types in the communities of our nation.

I am also Fire Chief for the County of Fairfax, Virginia. I am familiar with both paid and volunteer fire departments.

I am here to point out to you the many and serious concerns of our nation's fire chiefs to the very detrimental funding reductions contained in the proposed federal budget for Fiscal Year 1986-87.

Since the release of the report "American Burning", the Federal Government has become a key partner with state and local governments in a nationwide battle to reduce the tragic life loss and unnecessary property loss that results from fire each year in the United States.

This partnership has finally started to show significant impact in reducing these losses, but the battle has just begun.

Efforts by the United States Fire Adminstration (U.S.F.A.), National Fire Academy (N.F.A.), and Center for Fire Research (CFR) have helped to provide a diverse attack on fire from several important directions.

A $2 million dollar proposed reduction in the United States Fire Administration (U.S.F.A.) budget for fiscal year 86-87 threatens viable and successful efforts like the Community Partnership Against Fire, Anti-Arson, and important Fire Fighter Health and Safety programs. Also threatened is Operation Life Safety, a novel and joint effort of the International Association of Fire Chiefs in concert with private sector initiatives directed at developing and implementing more economical and appropriate means of providing "built-in" fire protection to buildings throughout our nation.

Zero funding proposed for the Center for Fire Research can only result in a total lack of sorely needed research into fire and its production of toxic agents and by-products which continue to kill thousands of our citizens each year. We find continuation of fire research as important to fire safety, as is research to our armed forces in keeping themselves abreast technologically.

At the National Fire Academy the elimination of student stipends which fund travel costs for fire officers from around our country to attend advance technical and management training is also of major concern to us.

As Fire Chiefs we must be constantly upgrading the knowledge of our senior fire commanders in developing their management skills for the time when they assume the position of fire chief in communities all across our nation. The National Fire Academy has become a most crucial yet efficient and effective means to that end.

Elimination of student stipends not only hits hard at the important development of future fire officers, but more importantly, impacts very negatively on the smaller and volunteer fire department of our nation that can ill-afford to bear travel costs for such training.

The best way to accent the severity of the National Fire Academy budget reduction is to understand that of approximately 30,500 fire departments in our nation, two-thirds or 20,000 serve populations of under 2,500 people. The only hope for small fire departments like these is the continuation of National Fire Academy student stipends to allow such departments to have their officers receive crucial technical and advanced management training which they could not otherwise afford or provide.

The International Association of Fire Chiefs feels strongly that the Government of the United States must continue to play an important and key role in all these important fire related areas in an effort to continue an effective battle against fire throughout the United States. To proceed with reduced funding for FY86-87 is to turn the back of government to its citizens and to allow fire to continue to take its tragic and unnecessary toll throughout our great nation.

We alert the House of Representatives of the most severe impact of these budget reductions and hope that the members of Congress will stand strong in assuring all of our citizens and firefighters a continued commitment to reduce the terrible loss in lives and property that continue to result from fire in America.

Mr. LUNDINE. Thank you very much for you testimony. Mr. Monihan?

STATEMENT OF E. JAMES MONIHAN, CHAIRMAN, NATIONAL VOLUNTEER FIRE COUNCIL

Mr. MONIHAN. Thank you, sir. I am James Monihan, chairman of the National Volunteer Fire Council. And first, on behalf of the Council and the Nation's 1½ million volunteer firefighters, I want to thank you and your colleagues in Congress for your support and help over the long haul over the past years.

I'm here to endorse and urge reauthorization of these three agencies; the Center for Fire Research, the Fire Administration and the Fire Academy. While we don't always agree with their individual decisions, such as a current plan to separate leadership of the Fire Administration and Fire Academy, we must have great respect for their overall achievements, and are gravely concerned with this latest, in a long series of threats, to their very existence which takes the form of the 1986 fiscal year budget.

We're shocked and dismayed at elimination of the Center for Fire Research and reduction in funding for the Fire Administration. But most devastating to the volunteer fire service community is the proposed elimination of the National Fire Academy stipend program, which you've heard about earlier.

If this is permitted to occur, many of our people will not be able to attend these programs. This could result in the closing of the facility due to an artifically produced drop in utilization. The drop in utilization won't be because of lack of desire, it will be lack of resources. It will also cause attendance to become regional, because as Chief Isman said, the people in this area can get to the Academy. If you have to fly, you have to pay. It will also preclude the opening of the western campus at Carson City, NV. Add to this the possible dilution of the fine offerings due to the need to seek students elsewhere just for survival of the Academy, and you can see why we have grave concern.

Gentlemen, we hear a lot about initiatives from the private sectors to augment governmental efforts. The volunteers who attend these programs at the Academy contribute salary, vacation time, a great deal of hours of study—because I can tell you, there's a lot of study in those programs, and time away from home and family. Now, if this is not evidence of initiative, please, somebody tell us what's expected. That's all we ask.

Another program for which we ask help is the Rural Community Fire Protection Program; and this is not included in the budget either. I recognize this is not the purview of this committee, but you've got to get your swings in while you can. And we do solicit the support of the Congress to reinstate this program.

Technically it's a grant program. In reality, it is the only contribution by the Federal Government to those fire companies which protect Federal lands. To be very blunt, when the world's wealthiest and most advanced nation makes a conscious decision that it can no longer support programs intended to save its citizens from death and hideous injury, to help its firefighters learn to better combat fires and other hazards while protecting themselves from

death and injury, and to help reimburse the private sector for services rendered in protecting the Government's own lands, it seems time for a reassessment of priorities and commitments.

We, of the Nation's fire service, are deeply commited to this battle against unwanted fire which we wage day and night. You, of the Congress, demonstrated your commitment in 1974 when you adopted the National Fire Prevention and Control Act. I urge you again to join with us in redoubling that commitment by reauthorizing the Center for Fire Research, the U.S. Fire Administration, and National Fire Academy, in working to restore funding for these agencies, and for the Rural Community Fire Protection Program. Help us also to restore the stipend program at the National Fire Academy. To coin a phrase, gentlemen. If you help us, can we better protect you.

Now, I have to take a shot at the earlier testimony by the Center for Fire Research, too. I have deep concern for a basic concept. The statement says the elimination of the Center for Fire Research is, "To allow the National Bureau of Standards to undertake new programs addressing critical new technologies."

Now, I want to know what on Earth is more critical than people being burned to death and hideously injured, jobs lost, and homes being lost on a daily basis? This is not just in case something happens, these people and our firefighters, career and volunteer alike, are dying and being burned every day. The Federal Government's involvement in the fire problem with the Center for Fire Research, the Fire Administration, the Fire Academy, and the Rural Community Fire Protection Program is not casual and it's not frivolous. It is an absolute necessity.

Thank you, gentlemen.

[The prepared statement of Mr. Monihan follows:]

National Volunteer Fire Council

Chairman
E. James Monihan
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Office (302)-645-3205

STATEMENT BY

E. JAMES MONIHAN, CHAIRMAN

NATIONAL VOLUNTEER FIRE COUNCIL

IN SUPPORT OF REAUTHORIZATION OF

THE

UNITED STATES FIRE ADMINISTRATION

NATIONAL FIRE ACADEMY

CENTER FOR FIRE RESEARCH

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES'

SCIENCE RESEARCH & TECHNOLOGY SUBCOMMITTEE

MARCH 21, 1985

45-946 O—85——4

GOOD MORNING

I AM JAMES MONIHAN, CHAIRMAN OF THE NATIONAL VOLUNTEER FIRE COUNCIL AND, ON BEHALF OF THE COUNCIL AND THE NATION'S 1½ MILLION VOLUNTEER FIREFIGHTERS, I WANT TO THANK YOU FOR THIS OPPORTUNITY TO ADDRESS THIS HEARING. THESE FIREFIGHTERS OPERATE AND MAINTAIN SOME 30 THOUSAND DEPARTMENTS LOCATED THROUGHOUT THE NATION AND ARE APPRECIATIVE OF THE SUPPORT YOU OF THE CONGRESS HAVE GIVEN OUR EFFORTS OVER THE YEARS.

THE NATIONAL VOLUNTEER FIRE COUNCIL STRONGLY URGES REAUTHORIZATION OF ALL THE COMPONENTS IN THE NATIONAL FIRE PREVENTION AND CONTROL ACT; NAMELY THE UNITED STATES FIRE ADMINISTRATION, THE NATIONAL FIRE ACADEMY AND THE CENTER FOR FIRE RESEARCH. I TIE THESE THREE TOGETHER FOR, AS THE REPORT "AMERICAN BURNING" POINTED OUT, IF WE ARE TO HAVE A MEANINGFUL EFFECT ON THE NATION'S FIRE PROBLEM, IT WILL REQUIRE A COORDINATED APPROACH AND THESE THREE AGENCIES, WORKING TOGETHER, HAVE THE ABILITY TO BRING TO BEAR THE NECESSARY RESOURCES AND IMPACT THE PROBLEM.

THE COORDINATION OF PURELY SCIENTIFIC RESEARCH IS BEING HANDLED QUITE WELL BY THE CENTER FOR FIRE RESEARCH AS THEY CONTINUE TO MAKE STRIDES IN UNDERSTANDING THE TRUE NATURE AND BEHAVIOR OF FIRE AND ITS BYPRODUCTS. AT THE SAME TIME, RESEARCH AND DEVELOPMENT BEING CONDUCTED BY THE UNITED STATES FIRE ADMINISTRATION HAS MADE GREAT STRIDES AND THE FAST ACTING RESIDENTIAL SPRINKLER IS A SHINING EXAMPLE OF ITS ACCOMPLISHMENTS. WE DO FEEL THAT IT IS IMPORTANT THAT THE ADMINISTRATION NOW BE PERMITTED TO CARRY THE PROMOTION AND PROPOGATION OF THE USE OF THE SPRINKLERS FORWARD SO THAT OUR CITIZENS MAY BENEFIT FROM THIS ADVANCE. I ALSO URGE THAT THE RESPONSIBILITIES OF THE CENTER FOR FIRE RESEARCH NOT BE DILUTED AND IT BE PERMITTED TO CONTINUE TO COORDINATE ALL GOVERNMENTAL RESEARCH ON FIRE.

THE NATIONAL FIRE ACADEMY, OF COURSE, IS THE TRAINING ARM OF THE TRIANGLE FORMED IN THE NATIONAL FIRE PREVENTION AND CONTROL ACT AND HAS ACHIEVED, IN A VERY SHORT TIME, AN OUTSTANDINGLY HIGH QUALITY EDUCATIONAL PRODUCT WHICH IS BOTH RESPONSIVE TO THE NEEDS OF THOSE CONCERNED WITH THE FIRE PROBLEM AND, AT THE SAME TIME, SUFFICIENTLY FLEXIBLE TO INCORPORATE THE BENEFITS OF NEW TECHNOLOGY INTO ITS EDUCATIONAL OFFERINGS.

WE SEE THE FEDERAL GOVERNMENT'S ROLE IN COMBATING THE FIRE PROBLEM AS BEING SUPPORTIVE OF STATE, LOCAL AND PRIVATE SECTOR EFFORTS, HOWEVER, WE DO URGE CONTINUITY IN PLANNING BY THE USFA TO COORDINATE EFFORTS AND GAIN THE BEST POSSIBLE RESULTS. FOR THIS REASON, IT IS VITAL THAT THE ADMINISTRATION BE INSULATED AS WELL AS POSSIBLE FROM POLITICAL PRESSURES WHICH CAN CAUSE FRAGMENTATION OF ITS EFFORTS BY SHIFTING EMPHASIS FROM PROGRAM TO PROGRAM. THE DEVELOPMENT OF THE FAST ACTING RESIDENTIAL SPRINKLER WITH THE EXTREMELY LIMITED RESOURCES BOTH IN PERSONNEL AND FUNDING IS A GLOWING EXAMPLE OF WHAT CAN BE ACCOMPLISHED BY THE DEDICATED PERSONNEL OF THE FIRE ADMINISTRATION WHEN IT IS PERMITTED TO CONCENTRATE AND FUNCTION WITHOUT INTERFERENCE.

THERE ARE THOSE WHO WOULD SAY THAT THE EMPHASIS OF THE ADMINISTRATION AND, IN FACT, THE ENTIRE FIRE PREVENTION AND CONTROL PROGRAM, HAVE BEEN TIPPED TOWARD FIRE SUPPRESSION AS OPPOSED TO FIRE PREVENTION AND THIS STATEMENT WOULD SEEM TO HAVE SOME VALIDITY. THE REASON FOR THIS EMPHASIS, HOWEVER, IS LARGELY DUE TO THE FACT THAT THE FEDERAL AGENCIES HAVE BEEN RESPONDING TO STATE, LOCAL AND PRIVATE SECTOR INITIATIVES AS THEY HAVE BEEN DEVELOPING AND, NOW AS THESE EFFORTS SHIFT TOWARD FIRE PREVENTION, SO ARE THE EFFORTS OF THE AGENCIES. IT MUST ALSO BE KEPT IN MIND THAT THE WORKING FIRE SERVICE COMMUNITY IS VERY AWARE OF ITS RESPONSIBILITIES AND PROBLEMS AND THE FACT REMAINS THAT WHILE BUILDINGS ARE BURNING, CITIZENS ARE DYING, JOBS ARE BEING

LOST, NEW HAZARDS ARE BEING CREATED AND FIREFIGHTERS ARE BEING INJURED AND KILLED, THE URGENCY OF THAT PART OF THE PROBLEM DEMANDS ATTENTION.

THERE IS CURRENTLY AN ADMINISTRATIVE PLAN UNDER CONSIDERATION TO ELEVATE THE UNITED STATES FIRE ADMINISTRATION IN THE ORGANIZATIONAL STRUCTURE OF FEMA LEAVING THE NATIONAL FIRE ACADEMY IN THE TRAINING AND DIRECTORATE OF THAT AGENCY. WHILE WE STRONGLY ENDORSE RETURNING THE UNITED STATE FIRE ADMINISTRATION TO ITS ORIGINAL PLACE IN THE ORGANIZATIONAL STRUCTURE, WE DO FEEL STRONGLY THAT IT AND THE FIRE ACADEMY SHOULD REMAIN UNDER THE SAME LEADERSHIP MUCH IN THE FASHION THAT IT IS PRESENTLY, SINCE THE ACADEMY IS RESPONSIBLE TO THE FIRE ADMINISTRATOR. WE SUPPORTED THE REORGANIZATION, STREAMLINING AND RELOCATING THE USFA TO THE NATIONAL FIRE ACADEMY CAMPUS TO INCREASE EFFICIENCY AND IMPROVE COMMUNICATIONS. WE NOW FEEL THAT IT WOULD BE A SERIOUS MISTAKE TO DIVIDE THESE, POTENTIALLY REDUCING COMMUNICATION, COOPERATION AND EFFICIENCY. ADDITIONALLY, HAVING THE LEADERSHIP OF THE NATIONAL FIRE ACADEMY OUTSIDE THE FIRE PROGRAMS COULD POTENTIALLY SET THAT FINE EDUCATIONAL INSTITUTION IN SEVERE JEOPARDY SHOULD FUTURE REORGANIZATIONAL EFFORTS SURFACE.

FURTHER ON THE SUBJECT OF REORGANIZATION, WE MUST TAKE STRONG EXCEPTION TO THE 1986 FISCAL YEAR BUDGET. THE BUDGET THAT, AS PROPOSED, WILL SEVERELY CRIPPLE THE UNITED STATES FIRE ADMINISTRATION'S EFFORTS, ELIMINATE THE CENTER FOR FIRE RESEARCH, ADVERSELY AFFECT THE NATIONAL FIRE ACADEMY AND ELIMINATE STIPENDS WHICH ASSIST IN REDUCING COSTS TO PERSONS ATTENDING THE FIRE ACADEMY'S PROGRAMS.

AS YOU MIGHT SUSPECT, WE ARE PARTICULARLY CONCERNED WITH TERMINATION OF THE STIPEND PROGRAM WHICH HERETOFORE HAS TAKEN THE FORM OF REIMBURSEMENT FOR TRANSPORTATION AS A MEANS OF DEFRAYING EXPENSE TO THOSE ATTENDING ACADEMY PROGRAMS. IF THE STIPEND PROGRAM IS NOT REINSTATED IN THE BUDGET, WE FEEL THAT IT CAN, AND VERY PROBABLY WILL, HAVE THE FOLLOWING EFFECTS:

1. REDUCE THE ABILITY OF FIREFIGHTERS (VOLUNTEER AND CAREER ALIKE) TO ATTEND THE NATIONAL FIRE ACADEMY, THUS REDUCING THE ATTENDANCE. THIS COULD LEAD TO THE CLOSING OF THE NATIONAL FIRE ACADEMY AT EMMITSBURG BASED ON REDUCED UTILIZATION.
2. THE ACADEMY WOULD BECOME VERY REGIONAL IN ITS SERVICE AREA WHICH WAS NEVER THE INTENT OF THE ACT.
3. PREVENT THE NATIONAL FIRE ACADEMY WESTERN CAMPUS AT CARSON CITY, NEVEDA, FROM EVER BECOMING A REALITY.
4. DILUTE THE FINE EDUCATIONAL PRODUCT BEING DELIVERED JO THE FIRE SERVICE COMMUNITY AS A RESULT OF THE ACADEMY BEING FORCED TO TURN ELSEWHERE FOR STUDENTS.

INASMUCH AS WE ALREADY CONTRIBUTE SALARY, VACATION TIME, HOURS AND HOURS OF EFFORT AND STUDY AND TIME FROM HOME TO LEARN TO MAKE OUR COMMUNITY SAFER AS OUR MATCHING PARTICIPATION FROM " THE PRIVATE SECTOR", IF THIS IS NOT CONSIDERED ENOUGH, WHAT IS? I URGE YOU AND YOUR COLLEAGUES TO SUPPORT US IN OUR EFFORTS TO RESTORE THE STIPEND PROGRAM.

AT THE SAME TIME, THE BUDGET WILL REALLY HAMPER THE PROGRAMS OF THE UNITED STATES FIRE ADMINISTRATION AND THE FIRE ACADEMY AND TOTALLY ELIMINATE THE CENTER FOR FIRE RESEARCH AND WE SOLICIT YOUR SUPPORT TO CORRECT THESE

SITUATIONS AND RESTORE THE FUNDING AT LEAST TO THE FISCAL YEAR 1985 LEVEL.

QUITE CANDIDLY, I MUST SAY THIS IS A QUITE TIRING AND FRUSTRATING EXCERCISE TO BE CONTINUALLY ON THE DEFENSIVE TO PROTECT THESE PROGRAMS. IT SEEMS TO HAVE LITTLE TO DO WITH THE ADMINISTRATION IN POWER, OR THE COUNTRY'S ECONOMIC TIMES, BUT EACH YEAR WE ARE REPEATEDLY FACED WITH A MULTITUDE OF REORGANIZATIONS, RESTRUCTURES, BUDGET CUTS, ELIMINATIONS OF PROGRAMS AND IN FACT ELIMINATION OF ENTIRE AGENCIES INCLUDING BOTH THE FIRE ADMINISTRATION AND CENTER FOR FIRE RESEARCH OR ANY COMBINATION OF THE ABOVE. I MUST SAY THAT IT MAKES ONE SERIOUSLY WONDER HOW LONG THIS CAN GO ON AND HOW WE CAN EVER GET THESE PROGRAMS TO A POINT WHERE THEIR LIFE WILL BE SMOOTH. AT THE SAME TIME, I WOULD HASTEN TO POINT OUT THAT IT SEEMS A MIRACLE BUT IS, IN REALITY, A TRIBUTE TO FINE DEDICATED PEOPLE THAT STAFF THESE AGENCIES THAT THE PROGRAMS I HAVE REFERRED TO, AND MANY OTHERS, HAVE BEEN, IN FACT, ACCOMPLIHSED. THESE PEOPLE HAVE BEEN CONTINUOUSLY PLAGUED WITH STAFFING CUTS, RUMORS OF ELIMINATION, PERSONNEL LEAVING THE AGENCY IN FEAR OF ITS CLOSING, BUDGET CUTS, REORGANIZATIONS AND A MULTITUDED OF NEW LEADERS.

IN CLOSING, I URGE YOU AND YOUR COLLEAGUES IN THE UNITED STATES HOUSE OF REPRESENTATIVES AND UNITED STATES SENATE TO NOT ONLY CONTINUE AUTHORIZATION OF ALL THE FIRE PROGRAMS OF THE FEDERAL GOVERNMENT BUT ALSO JOIN WITH US IN RESTORING APPROPRIATE FUNDING TO THE CENTER FOR FIRE RESEARCH, THE UNITED STATES FIRE ADMINISTRATION AND NATIONAL FIRE ACADEMY AND, ON BEHALF OF THE NATION'S FIREFIGHTERS, PLEASE HELP US TO RESTORE THE STIPEND PROGRAM TO THE NATIONAL FIRE ACADEMY FOR, TO BORROW A PHRASE, "ONLY IF YOU HELP US CAN WE LEARN TO PROTECT YOU". THANK YOU.

BIBLIOGRAPHY

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	Member, Joint Council of National Fire Service Organizations
	Past Chairman, Nominating Committee National Fire Protection Association
	Member, Delaware Emergency Medical Services Advisory Council
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	Chairman, Lower Delaware Advanced Life Support Committee
	President, Delmarva Council of Hospital Executives
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FAMILY:	Wife - Maryjeannette (2 children)

Mr. LUNDINE. Thank you very much. I'm going to turn the Chair back to its rightful occupant, Mr. Walgren, but before I do I want to say that on behalf of so many people in rural America particularly, we really thank you and your colleagues for what you've pointed out is an incredible service.

I think that it is uniquely American. I don't know the international fire fighting scene that well, but the spirit of volunteerism and the dedication and the willingness to learn, of volunteer firefighters in upstate New York and I suspect all across America, is really, really remarkable. And it just seems to me the least that this Federal Government can do to give small stipends, that they're willing—in addition to fight fires on their own time, in their own communities to save farms and houses and other buildings and lives, to give them a little bit of a travel expense so they can come down here and do it more professionally, does seem to me to be an awfully compelling case, and I appreciate very much your testimony and salute you in what you and your colleagues do. Thank you very much.

I'm going to call on Mr. Schaitberger for his testimony and turn the gavel back to Mr. Walgren.

STATEMENT OF HAROLD A. SCHAITBERGER, DIRECTOR OF GOVERNMENTAL AFFAIRS AND PUBLIC RELATIONS, INTERNATIONAL ASSOCIATION OF FIREFIGHTERS

Mr. SCHAITBERGER. Thank you. I feel compelled to make a comment to Mr. Lundine before he escapes. I was pleased to hear you commend the Fairfax County Fire Department where he was a resident. I have to get my licks in and say that although Chief Isman has been the chief there for the last year, I began my career in Fairfax County and was the local President of its union for its first 5 years, and I'm sure that my local and its membership will be pleased to hear of your thoughts as to the capability and the service provided in Fairfax County.

Mr. LUNDINE. Thank you very much. I would just say one more thing before yielding back to you, that unfortunately I moved to the District of Columbia in my Washington residence, and had an opportunity to find out that they also have an excellent fire service, but it was because we had a fire in the house. And that tends to make one less than casual about this particular risk. You can know it intellectually, but until you have a fire in your house you don't really—it's like health, you don't appreciate it until you don't have it. And believe me, about a year ago we came to appreciate the professionalism also of the District of Columbia.

Now that I've taken care of most of the Washington area, I'll excuse myself.

Mr. SCHAITBERGER. Prior to making my comments I'd also say it's very good to sit on the same side with the Chief, on the same side of the table as opposed to across the table.

Concerning these hearings I'd like to take a little different approach. This morning we've really heard some very interesting and very important comments on the needs of America's fire service and our country, and on what has taken place. I thought maybe I'd take a little more historical view and just for a moment try to walk

through, in a pragmatic sense, you know, really where have we from come and where are we going?

I think I would start with "America Burning," and it was good to see the distinguished Chairman of the former commission, Professor Bland, here. We have high regard for him and that commission's work. And where we started was the commission specifically addressing the problem and making certain recommendations on where this Federal Government should go as it concerns addressing the fire problem in this country, and six things I'd like to mention that the commission stated.

One was that the Congress should establish the U.S. Fire Administration, to provide a national focus for the Nation's fire problem and promote a comprehensive program with adequate funding—and I underline adequate—to reduce life and property from loss of fire. It was also to establish a national fire academy to serve as a hub of the national training and educational center for the Nation's fire service.

It was to implement—cause the implementation of a National Fire Safety Education Program. It was to cause a reallocation of local resources from primarily fire suppression to extend out to fire prevention. It was to help improve the equipment and the techniques to reduce firefighter death and injury, and it was to provide research in the urban area of fire problem.

These are some of the broad goals where the U.S. Fire Administration, at that time the NFPCA, National Fire Prevention and Control Administration, began. The funding was recommended by the commission to begin at a startup cost of $5 million for the first year, that it should proceed to $50 million for the second year and then to $128 million. Now this was a recommendation of our Nation's fire experts, for our country to take a reasonable and adequate approach to help reduce the loss of fire that we were experiencing at that time.

But what really happened? What happened was that Congress enacted the Fire Prevention and Control Act of 1974, but for the first 3 years it operated on a funding level of somewhat less than 10 percent of its recommended funding levels. It became a very, very small part of a huge Department of Commerce. There are still those who would argue the pros and cons of it being a part of that Department, but I think the predominant view was that we were an unforgotten, small, little function in a very huge agency.

Then during the Carter administration, its reorganization, plan number three was offered as the way to elevate the focus and to improve the attention within the Government, by the Congress, and out toward the local and State government, for the Fire Administration and that it would be part of a larger disaster-oriented emergency management agency.

After deliberating with the administration and a lot of pushing and pulling and negotiations and suggestions and amendments, a plan was finally fowarded to Congress and we cast our support behind it; not just to come out of one department into another, but with the belief that the Nation's fire service would be better served and we would be able to provide a more clear and concise focus.

But what happened since the implementation of reorganization plan No. 3? We've been faced with continued inadequate budgets

recommended by the administration. The administration recommends the elimination of the agency itself, and only because of political pressures does it finally—is it forced by the Congress to reestablish that agency. It then turns around and recommends the elimination of the Center for Fire Research. And my hopes will be that with this committee's wisdom and the leadership of the Chair and the support of the Nation's fire service organizations, we will not allow that elimination to occur. And it's now recommended the elimination of a student stipend, which as you've heard is very important, not only to career firefighters, but to the vast volunteer community which may have even less ability to financially afford to participate.

So it seems to me where we have been heading is not a very good step forward. Now, this is not to say that important projects, important programs have not been implemented and successfully completed, because it would be unfair to suggest that. Project Fires has been mentioned, and the success of the National Fire Academy. But I want to focus the committee's attention to what I hope is the larger picture; and that is not only an academy which has successfully provided educational opportunities to thousands of people, but the National Fire Academy which selected a site in Emmitsburg, MD, and was to reside at that site and provide a significant educational opportunity to the Nation's fire service, and to those other professions involved in fire safety aspects; architects, code enforcers, building contractors.

And where are we at? We're now a small part of a larger emergency management institute.

We have a long way to go. Things that need to be done in the area of firefighter safety and health, for example, is still the development of a standardized medical protocol for the treatment of injured firefighters.

We need the research and development of further improved equipment such as ladders and ropes, so that problems and tragedies resulting from breakage of ladders and ropes can be eliminated. There is a great need for research into occupational stress and it's impact not only on career firefighters, but on those that serve as volunteers. And there is need for research into the impacts, dangers and possible protections for firefighters from burning synthetics, exposure to carcinogens and other toxic substances and chemicals.

It seems very interesting to me that a country that spends tens of billions of dollars for questionable weapon systems to protect our citizens from its enemies, and the same country that spends hundreds of millions of dollars in a civil defense effort, which is to protect our citizens from the holocaust that we hope and pray will never take place, is only willing to spend a very few dollars for the everyday tragedy that occurs and is caused by fire; the deaths, the injuries, and the billions of dollars in loss of property that takes place everyday in every State in this Nation. That raises a big question mark in my mind on are we going in the right direction?

The IAFF strongly supports not only the reauthorization of the U.S. Fire Administration, the National Fire Academy, and the Center for Fire Research, but would ask this committee and its Chairman to take a look as to whether additional funds need to be

put forward and made available. Our International is sophisticated enough, hopefully, to understand the severe budget problems that you're faced with, the tremendous deficit that Congress must deal with, but I think priorities are the questions that must be answered, and we think the safety of our citizens from fire should remain a very high priority.

We thank the Chairman for the opportunity to make these comments, and will be willing to answer any questions.

[The prepared statement of Mr. Schaitberger follows:]

TESTIMONY

BEFORE THE

SUBCOMMITTEE ON SCIENCE, RESEARCH & TECHNOLOGY

On

REAUTHORIZATION FOR FY 1986
U.S. FIRE ADMINISTRATION, NATIONALAL FIRE ACADEMY
AND
CENTER FOR FIRE RESEARCH

March 21, 1985

presented by

Harold A. Schaitberger, Director -
Department of Governmental Affairs and Public Relations

International Association of Fire Fighters

Mr. Chairman, Members of the Committee, My name is Harold Schaitberger and I am Director of Governmental Affairs and Public Relations for the International Association of Fire Fighters. Our international union represents 175,000 professional fire fighters with membership in each of the 50 states. We appreciate the opportunity to appear today to express our views concerning the reauthorization of the United States Fire Administration, the National Fire Academy, and the Center for Fire Research. In order to better understand our concerns on what we believe is the inadequate funding of these essential governmental programs, a brief review of history of the focus on the fire problem by our federal government would be helpful.

It has now been almost 15 years since the National Commission on Fire Prevention and Control released its report entitled, "America Burning". The findings in that report conducted by a distinguished presidential Commission on Fire Prevention and Control helped open the eyes of the American public and our nation's government to some harsh facts. The United States, the greatest nation on earth which has the most advanced technology in the modern world had the highest per capita death and property loss rate as a result of fire of all the world's major industialized nations. The Commssion's report included the following recommendation:

1. That the Congress establish a U.S. Fire Administration to provide a national focus for the nation's fire problem and promote a comprehensive program with adequate funding to reduce life and property loss from fire.

2. The establishment of a National Fire Academy to serve as the hub of a national training and educational system for the nation's fire services.

3. The implementation of a national fire safety education program.

4. The reallocation of local resources from primarily fire suppression to fire prevention.

5. The improvement of equipment and techniques to reduce fire fighter death and injury.

6. Research in the urban fire problem. The Commission further recommended the reinforcement of supporting programs in other agencies, including an increase in burn treatment centers units and programs in the U.S. Department of Health, Education and Welfare.

The legislation creating the U.S. Fire Administration (at that time the National Fire Prevention and Control Administration), the Fire Prevention and Control Act of 1974, was structured to provide for a United States Fire Administration and the establishment of the National Fire Academy within the United States Fire Administration which was to facilitate specialized training in areas subject to the jurisdiction of fire protection agencies and further to assist state and local jurisdictions in the planning and implementation of their own fire protection programs.

The recommended appropriations for planning, development and implementation of this proposed U.S. Fire Administration was $5 million for the first year $50 million for the second year and $128 million for the third year. On October 29, 1974, President Ford signed into law the Federal Fire Prevention and Control Act, Public Law 93-498. Our nation's fire services for the first time felt that the United States Congress recognized that a federal focus and federal attention must be given to this terrible crises occurring in our nation. The United States Congress at that time made clear their concern by stating that fire was an undue burden affecting all Americans and that such losses of life and property from fire were unacceptable to the Nation. The Congress further stated that the unacceptable high rates of death, injury and property loss from fire could be reduced if the federal government established a coordinated program to support and reinforce the fire prevention and control activities of state and local governments.

The nation's fire service organizations were buoyed by the clear intent of Congress to create this federal fire focus and address the fire problem on a national level by lending support and assistance to state and local governments. Unfortunately, the recommended funding levels for this new Administration were never reached, never even close. The Administration has been funded at a miniscule level since its establishment. During this same time, our nation's fire service organizations, including the IAFF, through the Joint Council of National Fire Service Organizations have strongly supported the reauthorization of the Fire Administration and strongly supported increased funding for the Administration, the Academy and the Center for Fire Research each subsequent fiscal year.

The first three years of existence for the Administration 1975-1978 seemed to be adequately funded at best. We felt that the Administration at that time was viewed as an insignificant program within an immense Department of Commerce. We believed the program did not receive the attention, understanding or support from a Commerce Department primarily focused and involved in other program areas of federal government. Therefore, the nation's fire service organizations after considerable deliberations supported the proposed Reorganization Plan No. 3 proposed by the Carter Administration which would meld the U.S. Fire Administration into a super disaster oriented agency now known as the Federal Emergency Management Agency, FEMA. Our support was not offered without considerable discussion, review and amending of the proposed plan so as to protect the status, focus and level of program commitment for our nation's fire protection operations. Now, after over 4 years of FEMA, not only have we been faced with inadequate funding but in 1982, the current Administration recommended the elimination of the U.S. Fire Administration and in 1983, the elimination of the Center for Fire Research. Only through the efforts of the Joint Council, its member organizations and the continued and consistent support of the U.S. Congress and in particular, this Committee and its distinguished chairman, was the Fire Administration reauthorized, funds appropriated and allowed to continue in existence.

So, where are we today? We are looking at an Administration budget which as requested and recommended would in real dollar terms, when adjusted for inflation, mean a net decrease in available funds for our nation's fire service programs. We have a National Fire Academy which is now a small part of a larger federal Emergency Management Institute. This Institute, which occupies the site originally acquired for the Fire Academy itself has now all but engulfed our nation's fire service education programs. We have a Center for Fire Research which continues to do important work but under a constant threat of either inadequate funding or an Administration which recommends its total elimination. The fact of the matter is after 15 years our nation's fire service interest at the federal government level has moved forward very little.

This is not to say that significant strides have not been made since the establishment of the Fire Administration and of our National Fire Academy because many programs have been developed and successfully implemented. A few examples of some of these successful programs and our continued support for their existence follows: The continuation of the Open Learning Fire Service Program as part of the National Fire Academy. This Grant Program provides fire fighters in all 50 states with the opportunity to earn a baccalaureate degree in fire administration and fire prevention technology. Fire fighters are able to learn at a distance from the college campus while guided and assessed by faculty members. We believe that this program is a critical component for increasing the level of professionalism of our fire service personnel. The IAFF is very proud to be associated with the Open Learning Fire Service Program. It is a high quality cost-effective approach that provides the only higher education bachelor's degree opportunity available to all of the nation's fire fighters. Since this program offers a means to professional development available nowhere else, we are very concerned and committed that the program be maintained and adequately funded.

In our view, fire fighter health and safety is the most important programatic area within the U.S. Fire Administration. As you are well aware, fire fighting is among the nation's most hazardous occupations with one of the highest line of duty death injury and illness rates. The Fire Fighters Integrated Response Equipment System Project (Project FIRES), which was initiated in cooperation with NASA, is an example of the progress that has been made in this area. While some progress has been made, we must nevertheless stress the absolute necessity of increased funding not only for the continuation but also for the expansion of the U.S. Fire Administration's effort if the unacceptable death, injury and illness rates among fire fighters are to be reduced. The work of Project FIRES which has developed improved lightweight personal protective clothing and equipment for the fire service is an excellent example of one step forward which has been taken.

Other fire fighter occupational health and safety research priorities, however, still need to be addressed. Such as, the development of a standardized medical protocol, the treatment of injured fire fighters, so that all fire fighters can

receive the highest quality medical care possible when they are injured. The research and development of improved equipment, such as ladders and ropes so that problems and tragedies resulting from breaking ladders and ropes can be eliminated. There is a great need for research into occupational stress and its impact on our profession. There is also a great need for research into the impacts, dangers and possible protections for fire fighters from burning synthetics, exposure to carcinogens and other toxic substances and chemicals.

Another program within the safety and health area of the U.S. Fire Administration in which the IAFF takes a particular interest is the Apprenticeship Training Program. This program managed by the IAFF in cooperation with the International Association of Fire Chiefs provides support for the development and tracking of basic fire training and related work and cooperation with municipal governments. The program is vital to the fire services and should be continued and adequately funded. At this time its funding has been greatly reduced.

Mr. Chairman, our International union is experienced enough to understand the procedures, pressures, and politics of our United States Government budget process. We understand that the looming deficit is of severe proportions and must be addressed and reduced. We also understand that the pressures on Congress to make vital decisions on where funding must be trimmed or cut in order to help reduce the deficit, is of no insignificant proportion. We do find it interesting, however, that at the same time that our country is spending hundreds of billions of dollars to develop questionable weapons systems for the defense of the citizens of our nation and at the same time spending hundreds of millions of dollars for the development of civil defense programs to protect our citizens from the possible halocaust we all pray will never take place, is still only spending a few dollars in helping to protect our citizens from the daily ravages that take lives, cause severe crippling injuries and destroys millions of dollars worth of property every day and in every state of this nation by fire.

We ask for the Subcommittee's continued support not only for the reauthorization of these programs but also for a new and increased commitment of funding so that a substantial reduction in the losses incurred can be experienced.

Thank you.

Mr. WALGREN. Thank you very much, Mr. Schaitberger. And then President Spaulding.

STATEMENT OF ROMEO O. SPAULDING, NATIONAL LEGISLATIVE LIAISON, INTERNATIONAL ASSOCIATION OF BLACK PROFESSIONAL FIREFIGHTERS

Mr. SPAULDING. Thank you, Mr. Chairman. I'm Romeo Spaulding, the national legislative liaison at the International Association of Black Professional Firefighters, representing some 8,000 black and minority firefighters across the Nation, which includes many of the firechiefs of the major cities across the country.

You've heard a lot of the technical responses to the questions that have been before you, and you heard a lot of responses—the organization that made responses to by the international—excuse me, by the Joint Council and the organization supports those responses. However, there are some other factors, I think, that I would raise at this time that I think should be considered.

First of all, if you would look at the statistics that report the fire deaths, you would find that approximately 84 percent of all fire deaths occur in residential facilities. And of that percentage, approximately 74 percent are black and minority, mainly blacks. And it raises a very significant problem; that if this is the point—and this has been occurring since the foundation of the U.S. Fire Administration and its impetus to reduce fire casualties and fire loss—that maybe we haven't really reached where we should be.

The other thing is that within the developmental processes that have occurred, we find ourselves sort of at maybe at a disadvantage—and I go back to the student stipend. I want to raise one question before I go into that.

I think in the law itself, if I'm not mistaken, it calls for the student stipend, and it's a part of the law. And I don't see where that can be eradicated without changing the law. I think we need to look back at that before we, you know, get too excited about the eradication of the student stipend itself. And we would fully support the student stipend if—let me go back to one thing.

Blacks are having a hard enough time getting to the Academy, getting into the programs presently. The eradication of the student stipend, if that would go through as purported, would totally annihilate blacks from being involved in the process and moving forward within the fire service as we, you know, think we should be. So, we think that would be a tragedy on the part of the administration and of course if this committee would fail to look at that particular position.

The other thing is that I think the fire service is being somewhat disadvantaged today also with a problem that has been with us that somehow we've sort of turned our eyes or turned our backs on, and that's a problem we call discrimination. It is rampant within the fire service, and I think the U.S. Fire Administration had begun to take some program development and a lot of other areas, to start working where the problem really is within the United States of America.

With the present direction of the administrative budget, as it relates to reducing the money within the programs that are present-

ly ongoing, would certainly not serve the best interest of the United States and especially for the clients that I represent. I would call on this committee to take a good look at what's happening within that particular area, because if we sit, and I guess be idle and close our eyes to this particular factor, we would find ourselves probably going back and regressing about 20, 30 years within the relationships—I'm speaking now of racial relationships—it's a reality; and this is not only happening within the fire service; I see it happening in other areas.

But one of the things that also will happen with this current projection of reduction in budgets, with the pool of resources decreasing, which would then cause a greater tension among those who have been sharing in the resources to provide the development and also the delivery of resources to the community in which they're served, it would create a devastating atmosphere within the fire service itself.

For instance, you may have quite a few organizations represented here in this room today that have a vested interest within—being partnerships within the delivery of services to the community, but if these services are reduced and there are no funds there, or there are a small amount of funds, basically what would happen is that we would then probably start going into each others' throat, thereby emaciating what would, you know, could happen positively within the fire service. And I think it's a reality, and I think we should look at it from a realistic standpoint and not go away from this particular setting, and look at what's happening within the prior administration itself and the fire service itself, and how this whole thing goes around in a circle and should be addressed.

The U.S. Fire Administration, as I look back over the records, had never been funded at the requested level. The programs and projections from a visionary standpoint I think are on target. However, the lack of funds and the other types of things creeping in, have caused it not to reach its goals with the timetables that it had set forth. And I heard a question earlier asked, what is in the future for the U.S. Fire Administration looking forward; and basically we're saying it would stretch out things.

I think the art and state of technology within this Nation is changing too fast to say to the fire service, you know, we will cut your funds and then get a response that we will stretch out the programs. By the time we reach where we would be 5 years down the road with a stretched out program, we will be 10 to 15 years behind where we should have been. And as a result, by the lack of visionary put into that process and causing a stretched out programmatic approach, we could then find ourselves in a more devastating atmosphere as relates to reducing the life loss and the property loss as a result of fires.

That's basically what I have to say to you this morning. I apologize for not having my statement written to you this morning. However, as most of you know what's happening here in Washington, I am under the scrutiny of the Justice Department, who is trying to say let's do something in the fire service that I think we've tried to get away from, and that's why I raised the question about discrimination. It's a real—it's reality.

And I would say to the members of the Joint Council, they have worked very hard, they have been very sensitive individuals to help in this area, and I would applaud them for their work and their leadership across this Nation to help, and also to you and your committee. I think you have done a great job.

The moneys that were put into the U.S. Fire Administration for volunteer fire prevention programs, I think was a very positive move. I think that needs to be improved on and I think we can move forward by moving in that particular area, because I think the impetus was to put the money and the programs to where the fire problem really is.

Mr. LUNDINE. Thank you very much, we certainly appreciate that, and that's particularly eloquent testimony.

Let me ask, if your purpose, if your focus is simply on reducing life loss—if we were to focus just on that—where would each of you want to see us doing more on a nationwide basis? President Spaulding just mentioned the volunteer fire prevention program, the fire prevention program.

Could you develop what you would like to see us do on a nationwide basis if your focus was solely on reducing the loss of life? What would you have us trying to expand? Can I just ask for volunteers; and we'll go down the panel?

Mr. BOYD. I believe this was the original beginning of the "America Burning" and the report of "America Burning" was on the great reduction of the loss of life. It has succeeded moderately considering the funds that have been allocated.

In response to your specific question, Mr. Walgren, one of the things I think that is ironic, an earlier question was relative to "America Burning," and if we needed a review after 10 years, "America Burning" is out of print and we cannot even find it today to distribute to the firefighters in this country. And there are untold thousands who have not read it for the simple reason that it's out of print and we can't find it. And it might be that this body would be able to help to get the printing office to reissue or to reprint it.

Mr. LUNDINE. Very interesting.

Mr. BOYD. And it is desperately needed, not only for a recount. I believe that there are two basic elements in the reduction of life. First is the public education programs that have proved of such tremendous value throughout the known world. I realize that in America that we have a different social background than we do in some other areas, but it has been shown, very conclusively, that if we can teach people what is causing a given problem, they will begin to take the necessary measures to alleviate that problem.

The second is the residential sprinkler program that is going to put out a fire, and we've done tremendously well with the smoke detector program, but we need to keep in mind that a smoke detector, no matter what else it may, it is only going to warn that there is a problem, then it is up to the individual or up to the person to take the necessary steps in order to alleviate, or to get out of the building, to alleviate the problem or whatever. The residential sprinkler system will control that fire or control that problem.

I believe those two things would do more than anything, in my 40 odd years in the fire service, to reduce the fire loss. And after

you've picked up as many bodies as I have in those years as a fire marshall, it gets to the point where you'll do almost anything to reduce the loss of life. I've seen too many children, and I don't want to see them anymore.

Mr. BOEHLERT. Mr. Chairman, would you yield for just a moment, please? Mr. Boyd, what percentage of American homes have smoke detectors and what percentage of American residences have residential sprinkler systems? Any feel for that?

Mr. BOYD. I can't give you a percentage. I can tell you that there are enough smoke detectors been manufactured that possibly 80 percent of the American homes could be equipped with smoke detectors. How many of those are operable? How many of the batteries have worn out? How many have been taken down for other purposes? How many are really operable today? I think nobody in the world can really tell you. We're based on some surveys and based on some manufacturing information.

It has done a tremendous job and we have reduced the incident of fire in this country; as was pointed out by Mr. Gerard, that I think last year for less than 6,000 people had lost their lives—and smoke detectors had a great part.

The sprinkler, the residential sprinkler is in its very infancy. There are three or four cities in America; San Clemente, CA, was one of them; Cobb County, GA, is another one, that were two that have done as much as any other to really get into the act. Some other few areas have begun to pass local legislation requiring the use of residential sprinkler systems; and attempting to spread that residential sprinkler system into a residence other than a one and two family dwelling—and possibly this is an area that is also being explored.

Mr. BOEHLERT. What was the experience at the local level in those jurisdictions? We're having a very difficult time in my home county with the county board of legislators trying to pass, under the leadership of a professional fire fighter, a local ordinance requiring smoke detectors in multiple dwelling residences. And it's, you know, all the things you hear, the invasion of privacy, Big Brother, all these things, and yet the objective, obviously, is to save lives.

What kind of experience did they have in these jurisdictions? Was it a long, drawn out battle?

Mr. BOYD. Yes, it has been a long, drawn out battle within this concept of adopting an ordinance for the enforcement of smoke detectors. Now, this—a survey has been done on that by the U.S. Fire Administration several years ago.

One of our greatest problems in the adoption of legislation—and if you have adopted the national codes—the life safety code is published by the National Fire Protection Association, which is the most widely used code next to the electrical code in America, requires a smoke detector in every one and two family residential occupancy, in apartment buildings and now in hotels throughout the country. So it is requiring smoke detectors in the multiple occupied or in the single occupied residences.

Our problem comes in that in the one and two family residence—that's still your castle—and neither the fire service nor anyone else

can come into your home and inspect to see that you have an operable smoke detector if you say I don't want you to.

Now various ordinances have been passed enacted in different levels, different places, that that house must be equipped with a smoke detector before it's sold, so that if the house goes on the market, for any reason, it has to be equipped before it can be sold. But to say that it—how do you enforce it all the way? You don't. You said it; it's a matter of public education. And this is the reason I say public education is one of those in the forefront.

Mr. BOEHLERT. Well, from this side we want to be helpful and partners to you. Thank you very much, Mr. Chairman.

Mr. WALGREN. Thank you, Mr. Boehlert. Mr. Schaitberger.

Mr. SCHAITBERGER. I'd like to answer your specific question about what is something we can do to directly cause a reduction in the loss of life. A lot of work has been done in the suppression area and more work needs to be done in the prevention area, in the education area, and agreed, all these need additional work. But something was mentioned this morning that our International Union has embarked on this year, and that is looking into a whole new question on the cause of loss of life; and that's on the materials that we're using to construct our buildings and to construct our homes.

Now the fact of the matter is that the vast majority of fire deaths are not caused by fire. They're caused by the inhalation of a variety of byproducts given off by burning materials. It's also been assumed over the years that carbon monoxide causes the majority of these deaths, and everything that burns gives off carbon monoxide.

We are moved and are very interested in trying to determine is this the case. There has been a lot of work that has been done in the scientific community, a lot of work by the Center for Fire Research, the National Bureau of Standards and by some private universities, that suggest that a lot of the materials that are being used in the construction of our buildings give off very toxic byproducts, that in small quanities and proportions can cause great harm and death. And there's a number of instances that we cite to draw a focus in on this particular problem.

For example, the MGM Grand fire where 85 people lost their lives, but I believe 83 of them, the fatalities, were on fire floors far above the center of the fire itself. We've had the Stouffers Inn, we've had the Beverly Hills Supper Club, we've had the Hilton Hotel in Las Vegas.

The fact of the matter is that there are an extraordinary number of lives that are lost, and the question has now been raised, what is really killing these people and what is killing our people, and what are the long-term effects as opposed to just the short term effects for career firefighters by the byproducts given off by a lot of materials that are used in today's construction?

So a suggestion would be to ask this committee, if it finds that it's within its jurisdiction, to hold a specific set of hearings on the question of toxicity in fires, and whether or not there in fact is reason to take a new look at code enforcement and development, whether there should be or could be any testing criteria and standards for products used in the construction of buildings, in order to

help develop a more fire safe and less life threatening situation in case there is a fire. So that would be one specific area we would suggest.

Mr. WALGREN. Thank you very much. Are there other thoughts that you gentlemen would like to raise that you feel greater emphasis could pay great dividends? Mr. Gerard.

Mr. GERARD. If I could, Mr. Walgren. I believe that Howard Boyd hit the two key issues right on the head, and as the Fire Administration is moving ahead with their programs, the public awareness of the need for a concern for fire safety. I think we've all seen over the past few years a heightened awareness on the part of the people that fire is a serious problem.

One of the ways to deal not only with the fire itself, but with Mr. Schaitberger's concern about toxicity which we all share, I think that that's a very serious concern that has been investigated and studies have been conducted. In fact, the NFPA has conducted several studies on that issue, the National Bureau of Standards has done some of the key research in that area. But I would submit to you, that if the sprinkler puts the fire out, there are no toxic products of combustion because there is no fire to generate them.

And so, going back to the very basic issue, if a sprinkler system can extinguish a fire in its incipiency, then it solves all of the problems. Of course a sprinkler system isn't going to solve all of the problems in any case, but the smoke detector—I think the studies that have been done—we did some in Los Angeles while I was still a fire chief there, that indicated that somewhere between 40 and 50 percent of the fire deaths that occur, a smoke detector would not help save that life, simply because they're either bedridden, they're invalids, they're under the influence of drugs or alcohol or for some other reason, they're not able to react to a stimulus from a smoke detector.

So that even if smoke detectors were in 100 percent of the dwellings and they all worked—and as Howard pointed out, there's no way to know that—even if that were the case, we would still be talking about half of the fire deaths still occurring.

The sprinkler system, most people estimate, could probably save another 40 percent, so that we could begin to achieve some 90 percent reduction in life loss, but it does require leadership.

I think if there's any single word that applies to the Fire Academy, to the Fire Administration, to the Center for Fire Research, the entire Federal fire focus, that word is leadership. It does in fact establish the issue, it does in fact identify some solutions to those issues and helps local government move ahead with that. I think that really is the hallmark of what's been going on in the Federal fire focus; providing leadership for how to identify what the problem is in your community and how to move ahead with that.

Mr. Boehlert, I made a note to get together with you and your staff to help provide you with some of the research that has already been done on how to get that detector ordinance passed in a local community. The Fire Administration had as one element of one of their programs several years ago that very issue, how do we get an ordinance passed locally to install smoke detectors in dwellings, because it is a serious issue.

And I think this is an example of what I mentioned before about the Fire Administration, the Fire Academy, the Center for Fire Research being exemplary organizations, really delivering, really being in the forefront. Years ago the Fire Administration dealt with the very problem that your community is dealing with today. And that's an example of the kind of leadership they provide and it's what we all ought to be looking to Washington for.

Mr. BOEHLERT. Let me ask a question, Mr. Chairman, if I may, to follow up on this. What are we doing in terms of educating from the base up, kindergarten up? I don't know if school has changed much since I was there, but we used to have a national firefighters week and what would happen, they'd bring the fire engine into the school and all the kids would run out, we were all excited—first of all, we got some time away from math and the other subjects, but secondly we climbed up in the fire engine and we met the firefighters and it was nice, and we went back to class and really didn't learn a darn thing.

I feel very strongly about this, that what we should be doing instead of having the fire engine in for the kids—maybe we should do that, too, but we ought to have sessions for educators, for the teachers, to instruct them so they in turn can come back to the classroom and instruct the young people.

I would venture to say that a good number of the smoke detectors sold in America are sold because kids think it's a darn good idea, it's a nice inexpensive Christmas present, and if we do a better job of educating young people, that will help in the overall effort.

Do you have any thinking on that?

Mr. GERARD. Yes, sir, Mr. Boehlert. I don't want anyone here to think that I fed you that question, but the National Fire Protection Association has probably one of the very best programs for schools that covers a curriculum of materials in fire safety education from kindergarten through secondary schools.

Mr. BOEHLERT. May I see some of the material when you get a chance?

Mr. GERARD. Yes, sir. We'd be happy to provide you with all of that. It's a very, very good program, plus it focuses in the community. I'm sure you've seen some of television spots with Dick Van Dyke with his stop, drop and roll, and so forth. We produced those television spots to help everyone learn about it. But the real benefit, we found, is when the children come home with a message from school, the reinforcement on television makes it a complete message. The adults get it one way, the kids get it another and it becomes a complete message in the home, and is a very effective program. And we, obviously, would like to see that spread more and more and more across the country, but we will get you your information.

Mr. BOEHLERT. And another thought, dealing maybe with the National Association of Realtors, maybe you can get them on a voluntary basis to every time a home was sold, to have an informational packet that they would give to the purchaser of the new home; fire safety tips, cost of—what does a sprinkler system cost for a typical residence? Any feel for that?

Mr. GERARD. If I'm not mistaken, the efforts conducted by the Fire Administration in their basic research was to focus on being able to sprinkler a home for somewhere in the neighborhood of $2,000.

Mr. BOEHLERT. Which is a big factor if you're going to buy a home——

Mr. GERARD. Yes, sir, it is. But given the fact that—well, for example, in the city of Los Angeles, which I'm most familiar with, having been on the fire department there for 30 years, in Los Angeles there are about a million dwelling units. If you spent $2,000 to sprinkler all of them you'd spend $2 billion. The cost to the fire department annually is $200 million. If you just saved half of that, which you could if everything in Los Angeles were sprinklered, you theoretically could save about half the cost to the fire department, so that you could amortize that cost at the rate of $100 million a year and in 20 years pay for it, and from then on you're saving the money.

So I think you can begin to justify the cost, plus the fact that you're not eliminating any jobs as a result of property burning, you reduce the life loss by 90 percent, you reduce the cost of insurance—because most insurance companies today insure on the basis of loss to premium ratio. If the losses go way down, the premiums are going to have to go down. That would make insurance companies very happy, I mean, that would be less money flowing through the insurance company, but still it would reduce the premium.

And I really believe that you can make a case for a sprinkler system in a residence being cost effective, although you have to be forward thinking in order to be able to accept that premise.

Mr. BOEHLERT. Have you ever toyed with the idea of perhaps a tax credit or some sort of——

Mr. GERARD. Yes, sir, we've talked about that. In fact, we've talked to some legislators about developing tax credits similar to the energy tax credits, and I think that's a very good program. It's been talked around a little bit here and eventually that is going to happen, I believe.

Mr. BOEHLERT. Thank you very much.

Mr. WALGREN. On the same subject, what's the status of the water supply to the individual home sprinkler? There used to be some reservations about whether or not you could get a good attachment to the public water lines; and how do you solve that problem?

Mr. GERARD. There are several issues there. One is, in many communities the water utility has an extra charge if you hook a sprinkler system up to the water system. It's hard to justify that on any kind of logical basis, but they do it. In some communities the tax assessor comes in and not only do you not get a tax credit, but if you install a sprinkler system, you get an increase in your taxes because the property's worth more.

The water system connection is a serious problem in some communities because of the charge for a fire service connection. But I believe in those communities where sprinkler systems in residences are becoming more of a reality, the local politicians have identified that that's nonsense to charge for something that's going to improve the entire community, and so they're beginning to affect

those water service charges. But it is an issue, it's definitely an issue that needs to be addressed.

Mr. WALGREN. How about physical problems in connection—other than their will to charge you or change your——

Mr. GERARD. I don't think the physical aspect of it is any problem, because the typical residential sprinkler system, the whole intent of the design that was one of the criteria for the design as proposed by the Fire Administration when they were supporting that research, was that the water supply requirements not exceed the water supply that's in a normal single family dwelling. So theoretically, the water that's required to fill the bathtub or flush the toilet is sufficient to provide a water supply for the sprinkler system, as it's designed in the dwelling.

Typically the standard under which those systems are installed is written by the National Fire Protection Association, and our standard requires that two heads be able to extinguish most the fires. So the system is required to provide water to two heads, which is about 25, 30 gallons of water per minute.

Mr. WALGREN. And so from a utility company position, they would have no reason to object to a home sprinkler system.

Mr. GERARD. No, sir. The demand would never tax the water system.

Mr. WALGREN. And they don't object at that point, is that——

Mr. GERARD. Well, they can be brought to the point where they don't object.

Mr. WALGREN. Do we have any kind of a national or a model code of behavior that would have them not object to a home sprinkler? Do we have a code in a model form that would—that you could take the utility company in a small town in America and say look, there is no reason to have any obstacle here?

Mr. GERARD. That's a good question. I really can't answer that question. It would be the American Waterworks Association that would establish the standards for that, and that's something that I should look into and I'll get back to you on that.

Mr. WALGREN. I'd like to know what their position is, whether they see any problems and whether they could be supportive without reservation.

Other thoughts? Yes, Mr. Isman.

Mr. ISMAN. If I could just one further—well, two comments actually. In Fairfax County, VA, we're currently negotiating with the Fairfax Water Authority to eliminate the additional charge for residential sprinkler systems; and has been stated, it's a major, major issue with them, even though it's only going to be standby water and it's not going to be used. And actually we feel that it would probably lessen our use of water when we got on the scene, which is unmetered. So we think it's a benefit to them, but the utility company certainly does not believe that.

In addition, the Fire Administration, under their Operation Life Safety, which is a national program to look at this, one of the final items will be a code, a suggested code for residential sprinkler systems and for hook up, which can be utilized by the local water utility. So that's an ongoing program of the Fire Administration, which we'll deliver just what you have requested.

Mr. WALGREN. Do you know when they anticipate reaching that point?

Mr. ISMAN. No, but I would expect it's fairly soon. The Operation Life Safety has been ongoing now for 2 years.

Mr. GERARD. I believe Operation Life Safety focuses primarily on the hotels, motels, the transient occupancy rather than single family dwelling.

Mr. WALGREN. But we ought to be looking for that on a residential level. Other thoughts? Mr. Monihan?

Mr. MONIHAN. To answer your question about deaths, I agree with everything everyone said here and I think there's another point that needs to be considered, generally, as far as the community is concerned, a major portion, of the fire deaths occur before we ever roll on the scene. From this you can see for before we ever roll on the scene. So the suppression side of our efforts aren't going to affect those. The only thing going to affect these deaths is public awareness and public understanding.

The National Volunteer Fire Council has had as its goal for several years, fire prevention education in the schools. Mr. Gerard pointed out that the NFPA does have one of the best school age fire prevention programs I've ever seen. Where we run into problems sometime is getting it into the curriculum in the individual school district. That's where the problem comes up.

And again, there might be a way to model that—I don't know, but I know in my own State we do have——

Mr. WALGREN. Often times that's a lack of funds. Is that your experience that the local people don't have the money to buy the materials?

Mr. MONIHAN. That's part of it. Also, let's face it, it's competing for time with reading, writing, and arithmetic, and the teachers feel comfortable with what they're teaching. They're not terribly thrilled sometimes about going into this new area that's to them untested.

Mr. Boehlert was talking about the visit to the firehouse. We take children to the firehouse instead of taking the equipment out to the school. You also kicked the paint up while you were crawling around on those things, by the way, but that's a small price to pay to impress the children.

The point is, that we see an effect in the community after that visit. We bring, I think, the first four grades to the station. We see an effect in the community. You're walking down the street and run into a parent and he says, "Well, my kid's been to the firehouse again; he just made me clean out the cellar when he came home from school. So we know that that's where the action is. The trick is getting there."

And of course as far as our own firefighters are concerned, we're anxious—like Mr. Schaitberger said, to decrease the hostility of the environment. It's a hostile environment, there's no question about it. But the plastics and synthetics and all these things that go into it—you take a fireproof building and the thing becomes a bomb when you fill it up. So that's where I would put the emphasis.

Mr. WALGREN. The thought that most residential lives have been lost by the time you get there is a very interesting thought. Is there data to document that?

Mr. SPAULDING. Yes, there is data. As a matter of fact, the U.S. Fire Administration, I think the NFPA, has done some work on that, and there is a film out that dictates the spread of fire, the rate of fire, the heat buildup intensity, smoke intensity with suggested toxicity levels, which show what can happen to a person.

There has also been some behavioral studies done in this area to look at what happened to the, you know, what we call the human factor, a person faced with that. And all of it indicates, you know, when you conclude with it, that the victim has died before we get there. And how you substantiate that is by the postmortem medical on the victim itself. You can tell the—you know, taking blood samples and other samples of that person and running protocol on them, to tell what the level of toxicity buildup and all that, and most importantly, what caused the death.

Mr. WALGREN. Well, I would like the committee to look for some information on that and make it specifically a part of this record—and I'm sure there are various sources you can go to to get that documented in a tremendous way, because that really does focus you on fire prevention and public awareness related to it at that point.

And then, how about as fire service organizations, are we doing enough in that area? Someone mentioned earlier that we were allocating about 5 percent of our time to prevention and other countries were allocating 15 percent of their time.

Do we have a percentage of time that we know each of our organizations is giving just to that, which is so different than suppression?

Mr. SPAULDING. Speaking to that, I think something has happened here within the United States within the past maybe 5 or 6 years that has refocused the emphasis in that area. Prior to that, a lot of the emphasis was placed on suppression. Now with the U.S. Fire Administration, the Fire Academy embracing that particular training area there, there has been a refocus.

And so, the amount of time that has historically been spent in the suppression area, not looking at the prevention area, has changed and it is increasing.

I wanted to address one area that was mentioned before about public education or public awareness. That goes further than just with—we call it the recipients of the services that is provided. It also goes into making those aware, as was indicated there, who are responsible in political areas, making those aware who are in the manufacturing area, making all of our public aware of what the needs are within the fire service area totally. So, therefore, you would have a completed cycle for the area of reaching children within the schools.

I think it's not a question of competing for time. The curriculum that was alluded to is one that is developed to be integrated within the present curriculum structure of an educational system. Thereby, once the educator has been trained in how to disseminate and integrate that material, it can be done on an ongoing basis, on a daily basis and on a yearly basis so that the fire safety behavior messages would be included within the English language, arts, math, science and all of those, but you'll be talking about fire safety behaviors and terminologies that would sensitize the child or

the recipient of the educational delivery in the fire safety behavior area.

And of course that would serve as a benefit as that person moves out of the schools, secondary schools, into your colleges. Just to give an example, if the person is going into the field of engineering, they have been sensitized completely about what's happening within the fire safety area. When they begin to look at their designs of buildings, other designs, they would be sensitized not to do it ignorant of the fire safety factors. And thereby, we would begin to reach the total populous of the United States with the modification from a fire safety perspective that we are attempting to do. That's why I answer the question about the amount of time with that expanded response.

Mr. SCHAITBERGER. Mr. Walgren.

Mr. WALGREN. Yes.

Mr. SCHAITBERGER. I will just second the remarks of my good colleagues here concerning the change from suppression to prevention activities. I would give most of that credit to the U.S. Fire Administration. But I would like to make an additional comment concerning the loss of life that was mentioned; about whether most deaths do occur prior to the time we arrive on the scene.

I suspect that that may be the case in single residences and in occupancies where—or in smaller occupancy units. I don't know that that would be the case, and suspect that is not the case, when we're talking about larger occupancy units, multiple family dwellings, highrise buildings, and such. So I think that's something that has to be looked at within the type of structure and the size of unit before you could make a broad statement on that issue.

Mr. WALGREN. Well, I want to recognize my colleague from New York, if there's anything further that——

Mr. BOEHLERT. I'm all set. I thank the panel very much. I've learned a lot today and we are on your side. We want you to know that.

Mr. WALGREN. All right. Well, let me thank you very much on behalf of the committee for joining in creating this record and giving us this direction. We appreciate you as a resource. And I'd also like to underscore Mr. Lundine's comments about how much each of you are appreciated as the people who have served others and in less than tragedy, and that's the truth.

Thank you very much. We will reconvene at 1:30.

[Whereupon, at 12 p.m., the subcommittee recessed to reconvene at 1:30 p.m.]

AFTERNOON SESSION

The subcommittee reconvened at 1:41 p.m., in room 2325 of the Rayburn House Office Building. The hearing was stopped because an official stenographic reporter was not present. Therefore, the hearing officially reconvened at 1:51 p.m. Hon. Doug Walgren (chairman of the subcommittee) presiding.

Mr. Boehlert read the following opening statement before the official stenographic reporter arrived:

OPENING STATEMENT OF HON. SHERWOOD BOEHLERT

Mr. Chairman, Members of the subcommittee, ladies and gentlemen. Today, the subcommittee is honored by the vastly distinguished group of witnesses, many of whom provided the impetus for the Federal Fire Prevention and Control Act, established by Congress in 1974.

There is no doubt in the minds of members on this subcommittee and on the full committee, of the importance of the federal fire programs. The coordinating capacity of this federal effort to bring together professional firefighters, both volunteers and non-volunteers, fire researchers, state and local government officials, fire protection organizations and the general public is profound and unique. It is not a role, I believe, any other entity can serve.

With that, the subcommittee has taken a very close look at funding levels and program initiatives within the U.S. Fire Administration, National Fire Academy (under FEMA), and the Center for Fire Research (CFR). I can assure you that the cut in the travel stipends program for firefighters to attend classes at the National Fire Academy (NFA) will be addressed by the subcommittee, as well as restoration of the funds for the Center for Fire Research.

Mr. WALGREN. We thank you for being here, so please proceed.

STATEMENT OF SAMUEL CATANZANO, JR, P.E., VICE PRESIDENT, ELECT, SOCIETY OF FIRE PROTECTION ENGINEERS

Mr. CATANZANO. Thank you, Mr. Walgren. It's a pleasure to be here from that No. 1 city in the country, our city of course, but I'm really here representing the Society of Fire Protection Engineers. I'm their vice president elect. I'm also vice president of M&M Protection Consultants and a fire protection engineer.

The Society of Fire Protection Engineers is the International Technical Society for engineers involved in the multifaceted field of fire protection engineering. Its 3,350 members, located primarily in the United States, include engineers in private practice, in industry, in government, in manufacturing and installation of fire protection equipment, as well as technical members of the fire and casualty insurance industry. Fire protection engineers largely determine fire safety for all Americans through their impact of the design of buildings and plants, both public and private and their contribution to setting codes and standards. To achieve cost-effective, relevant, and engineering fire safety requires a solid scientific, technological base.

Engineering societies, and the SFPE is a part of the community of engineers, exist to provide opportunities for engineers in a par-

ticular discipline to exchange scientific and technical information so as to better perform their societal responsibilities, the essence of which is the application of scientific principle to practical ends, such as the design, construction, and operations of efficient and economical structures, equipment and systems. The exchange mechanisms are many and include journals, newsletters, reports, published proceedings, handbooks, seminars, short courses, tutorials, symposiums and even informal discussions before and after formal activities.

The exchange of technical information presupposes the existence and continuing development of the science and technology which forms the basis of each discipline. For fire protection engineering in the United States, the repository of much of the science and technology, as well as its development, has been under the umbrella of the Federal Government. It should be recognized that significant work has also been done by the private sector. However, it can be estimated that 75 percent of the basic fire research in the United States is conducted or funded by the Federal Government, primarily under the auspices of the Center for Fire Research either through in-house programs or through grants and contracts.

Leading edge fire research in other nations of the world, such as Canada, England, Japan, and Sweden is also under the auspices of National Governments. Fire research in the United States by the Federal Government dates at least back to the 1920's with the work of Ingberg.

Fire research has been a Federal function because of the complexity of the phenomena of fire, its impact on society and because fire research involves such a myriad of industries and other interests, public and private, which would have neither resources nor incentive to undertake the needed fundamental research and subsequent development of engineering formulas and data. If they could, the product would probably remain proprietary, which is as it should be, and consequently never be made available for the common good. And example of CFR activity will illustrate.

The Center is developing means to predict the actual burning hazard of typical furnishings used in a building, such as upholstered furniture, desks, tables, chairs, filing cabinets, et cetera. Hazard is expressed in terms of rate of energy release, smoke development rate, and toxic gas production. This capability will enable the fire protection engineer to predict the total amount of energy and other products of fire likely to be produced within a given room or group of rooms. With this the engineer can evaluate the total impact of fire on the building occupants and on the structure. Then, rather than arbitrarily condemning a particular furnishing because of its hazard potential, alternate fire safety features can be designed and the total hazard managed in a cost-optimizing manner. The importance of such a capability is basic to fire protection engineering.

This breakthrough can be further applied to places of public assembly, such as theaters, sports arenas, auditoriums, and schools, thus enabling the fire protection to be engineered on the basis of the potential threat of an unwanted fire in a particular structure.

Although the CFR is a relatively small function within the total scope of the National Bureau of Standards and the Federal Govern-

ment, its impact on improving the fire safety of all Americans is enormous. The people and their Government get a very large benefit for a very small cost.

The SFPE supports and encourages the development and transfer of the science and technology of fire from whatever source, whether public or private. Citizens of our Nation need the fruits of that work. Historically that effort in the United States has been a proper function of the Federal Government and should continue to be so. The agency of opportunity is the Center for Fire Research.

Over the last 10 years there have been major advances in understanding fire and its impact on man's environment. From the SFPE's position, a progressively emerging analytical fire protection engineering technology is seen. It has the potential to evaluate the fire safety performance of a building or other entity even if it differs substantially from current practices or prescriptions. This capability is the essential element in improving safety, reducing the cost involved, rationally addressing design innovation and making fire safety features more meaningful and acceptable to those who must finance them, enforce them or live by them.

The technology, as it now stands, is promising, but incomplete. There are gaps in its scope and depth. A body of science has yet to be formed into usable engineering formulas and methods and be transferred to the practicing engineer. Recently, the Society of Fire Protection Engineers undertook a major nationwide survey, sending an inquiry to approximately 500 leaders in fire research and fire protection engineering requesting inputs on the needs of fire research and fire protection engineering in the context of the role that SFPE might be able to play. A copy of the typical letter of inquiry is attached. To date we have received responses from about 130 recipients. While each reply was unique and many focused on very specific areas of research or technology development needed, a generally consistent theme was evident. The theme was equally prominent in the responses of both fire research and fire protection engineers. It can be best expressed as four basic areas of research and development, each of which is only partially fulfilled at this time. These are:

First, the coordination and the establishment of a coherent statement of existing technology. Currently the technology of fire protection engineering is scattered and expressed in terms that are difficult to assemble and focus on a single problem. The recent work in the development of mathematical modeling capabilities covering fire development and growth now provides the opportunity for the development of a coordinated engineering methodology that will address current knowledge and expose technical gaps.

Two, filling the technical gaps. There are gaps in the state of fire safety technology, some of which will require basic research. Others may be developed from expansion of current efforts or at least partially from the current knowledge base. While there are knowledge gaps throughout the technology, the broadest gaps appear in real understanding and quantification of the ignition courses, so important to selection of materials and the development of retardants, the analytics of surface flame spread, the quantitative mechanism of extinguishment, water in particular, and the

physiological and psychological responses of humans when faced with fire problems.

Three, the development and cataloging of fire performance data on materials and systems. Currently many of the emerging analytical calculation methods will stand dormant unless there is an extensive program for testing materials and systems to provide the necessary engineering data.

Fourth, the validation of comprehensive approaches. There are now emerging a whole spectrum of models, concepts and systems. While many of these have been developed by competent scientists and are based on sound physics and chemistry as it is currently understood, it is necessary to have a program of adequately scaled and comprehensive proof tests to assure that the methods are trustworthy and to evaluate the degree of confidence that can be placed in them.

The invitation to testify asked, "What progress has been made in fire safety management since the release of the report "America Burning." The SFPE believes that the most important and lasting progress arises out of improved technology. Significant strides in the quantification of fire and its effects and the development of mathematical models and other engineering tools for evaluating actual hazard and risk stand as examples. The impact of this type of progress is cumulative, the worth growing with each technological advance. Developments to date are but a start. The real payoff will be in the future and requires the combined concentrated use of all the technology which we have, filling the technological gaps, producing the needed data and validating the tools produced. To reap the results, the effort must continue. Those results will yield a payoff in improved fire safety, economy and preservation of the Nation's resources.

In summary, the SFPE supports the Federal role in fire safety and particularly that of the Center for Fire Research. That support is founded upon the beliefs that: We are engineers applying engineering principles to fire problems; there are engineering solutions to fire problems; fire protection engineering requires a scientific base; the Federal Government has had an appropriate and effective historic role; and the CFR has produced cost-effective results transcending special interests.

We extend our thanks to the subcommittee, its chairman and staff for the invitation to testify on the engineering aspects of fire protection. This opportunity reflects our dedication to excellence in the practice and advancement of the science of fire protection engineering. We applaud the committee in its efforts to maintain the national commitment to improved fire safety. The Society of Fire Protection Engineers offers its assistance now and in the future to maintain and advance that commitment.

That concludes my testimony and I'm open to any questions you have.

[The prepared statement of Mr. Catanzano follows:]

Society of
Fire Protection Engineers

Advancing the Art and Science of Fire Protection Engineering

60 Batterymarch Street
Boston, Massachusetts 02110
617 482-0686

Testimony of

The Society of Fire Protection Engineers

by

Samuel Catanzano, Jr., P.E.

Vice President - Elect, SFPE

Vice President, M&M Protection Consultants

Pittsburgh, Pennsylvania

Subcommittee on Science, Research and Technology

Committee on Science and Technology

United States House of Representatives

March 21, 1985

* * * * * * * * * * * * * * * * *

Good afternoon . . . my name is Samuel Catanzano, Jr. and I'm here this afternoon representing, as vice president-elect, the Society of Fire Protection Engineers. I am also a vice president of M & M Protection Consultants and a registered professional engineer.

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The SFPE is the international technical society for engineers involved in the multifaceted field of fire protection engineering. Its 3350 members, located primarily in the United States, include engineers in private practice, in industry (automotive, utility, ferrous and non-ferrous metal, petrochemical, petroleum, retailing, etc.), in government (local, regional, and national) in manufacturing and installation of fire protection equipment, as well as technical members of the fire and casualty insurance industry. Fire protection engineers largely determine firesafety for all Americans through their impact on the design of buildings and plants, both public and private, and their contribution to setting codes and standards. To achieve cost effective, relevant, and engineered firesafety requires a solid scientific, technological base.

Engineering societies, and the SFPE is a part of the community of engineers, exist to provide opportunities for engineers in a particular discipline to exchange scientific/technical information so as to better perform their societal responsibilities, the essence of which is the application of scientific principles to practical ends such as the design, construction, and operation of efficient and economical structures, equipment, and systems. The exchange mechanisms are many and include journals, newsletters, reports, published proceedings, handbooks, seminars, short courses, tutorials, symposiums and even informal discussions before and after formal activities.

The exchange of technical information presupposes the existance and continuing development of the science and technology which forms the basis of each discipline. For fire protection engineering in the United States, the repository of much of the science and technology, as well as its development has been under the umbrella of the federal government. It should be recognized that significant work has also been done by the private sector. However, it can be estimated that 75 percent of the basic fire research in the United States is conducted or funded by the federal government, primarily under the auspices of the Center for Fire Research (CFR) either through in-house programs or through grants and contracts.

Leading edge fire research in other nations of the world such as Canada, England, Japan, and Sweden is also under the auspices of national governments. Fire research in the United States by the federal government dates at least back to the 1920s with the work of Ingberg.

Fire research has been a federal function because of the complexity of the phenomena of fire, its impact on society and because fire research involves such a myriad of industries and other interests, public and private, which would have neither resources nor incentive to undertake the needed fundamental research and subsequent development of engineering formulas and data. If they could, the product would

probably remain proprietary (which is as it should be) and consequently never be made available for the common good. An example of CFR activity will illustrate.

The center is developing means to predict the actual burning hazard of typical furnishings used in a building such as upholstered furniture, desks, tables, chairs, filing cabinets, etc. Hazard is expressed in terms of rate of energy release, smoke development rate, and toxic gas production. This capability will enable the fire protection engineer to predict the total amount of energy and other products of fire likely to be produced within a given room or group of rooms. With this the engineer can evaluate the total impact of fire on the building occupants and on the structure. Then, rather than arbitrarily condemning a particular furnishing because of its hazard potential, alternative firesafety features can be designed and the total hazard managed in a cost optimizing manner. The importance of such a capability is basic to fire protection engineering.

This breakthrough can be further applied to places of public assembly such as theaters, sports arenas, auditoriums, and schools thus enabling the fire protection to be engineered on the basis of the potential threat of an unwanted fire in the particular structure.

Although the CFR is a relatively small function within the total scope of the National Bureau of Standards and the federal government, its impact on improving the firesafety of all American is enormous. The people and their government get a very large benefit for a very small cost.

The SFPE supports and encourages the development and transfer of the science and technology of fire from whatever source, whether public or private. Citizens of our Nation need the fruits of that work. Historically, that effort in the United States has been a proper function of the federal government and should continue to be so. The agency of opportunity is the Center for Fire Research.

Over the last 10 years there have been major advances in understanding fire and its impact on man's environment. From the SFPE's position, a progressively emerging analytical fire protection engineering technology is seen. It has the potential to evaluate the firesafety performance of a building or other entity even if it differs substantially from current practices or prescriptions. This capability is the essential element in improving safety, reducing the costs involved, rationally

addressing design inovation, and making firesafety features more meaningful and acceptable to those who must finance them, enforce them, or live by them.

The technology as it now stands is promising, but incomplete. There are gaps in its scope and depth. A body of science has yet to be formed into useable engineering formulas and methods and be transferred to the practicing engineer. Recently, the SFPE undertook a major nationwide survey sending an inquiry to approximately 500 leaders in fire research and fire protection engineering requesting input on the needs of fire research and fire protection engineering in the context of the role that SFPE might be able to play. A copy of the typical letter of inquiry is attached. To date we have received responses from about 130 recipients. While each reply was unique and many focused on very specific areas of research or technology development need, a generally consistent theme was evident. The theme was equally prominent in the responses of both fire researchers and fire protection engineers. It can best be expressed as four basic areas of research and development, each of which is only partially fulfilled at this time. They are:

1. The coordination and the establishment of a coherent statement of the existing technology. Currently the technology of fire protection engineering is scattered and expressed in terms that are difficult to assemble and focus on a single problem. The recent work in the development of mathematical modeling capabilities covering fire development and growth now provides the opportunity for the development of a coordinated engineering methodology that will address current knowledge and expose technical gaps.

2. The filling of technology gaps. There are gaps in the state of firesafety technology, some of which will require basic research. Others may be developed from expansion of current efforts or at least partially from the current knowledge base. While there are knowledge gaps throughout the technology, the broadest gaps appear in real understanding and quantification of the ignition process (so important to selection of materials and the development of retardents); the analytics of surface flame spread; the quantitative mechanism of extinguishment (water in particular); and the physiological and psychological responses of humans when faced with fire problems.

3. The development and cataloging of fire performance data on materials and systems. Currently many of the emerging analytical calculation methods will stand dormant unless there is an extensive program for testing materials and systems to provide the necessary engineering data.

4. The validation of comprehensive approaches. There are now emerging a whole spectrum of models, concepts, and systems. While many of these have been developed by competent scientists and are based on sound physics and chemistry as it is currently understood, it is necessary to have a program of adequately scaled and comprehensive proof tests to assure that the methods are trustworthy and to evaluate the degree of confidence that can be placed in them.

The invitation to testify asked, "What progress we have made in firesafety management since the release of the report 'America Burning'?" The SFPE believes that the most important and lasting progress arises out of improved technology. Significant strides in the quantification of fire and its effects and the development of mathematical models and other engineering tools for evaluating actual hazard and risk stand as examples. The impact of this type of progress is cumulative, the worth growing with each technological advance. Developments to date are but a start. The real payoff will be in the future and requires the combined concentrated use of all the technology which we have, filling the technological gaps, producing the needed data, and validating the tools produced. To reap the results, the effort must continue. Those results will yield a payoff in improved firesafety, economy and preservation of the nation's resources.

In summary, the SFPE supports the federal role in firesafety and particularly that of the Center for Fire Research. That support is founded upon the beliefs that . . .

1. we are engineers applying engineering principles to fire problems,

2. there are engineering solutions to fire problems,

3. fire protection engineering requires a scientific base,

4. the federal government has had an appropriate and effective historic role,

5. the CFR has produced cost effective results transcending special interests.

We extend our thanks to the subcommittee, its chairman and staff for the invitation to testify on the engineering aspects of fire protection. This opportunity reflects our dedication to excellence in the practice and advancement of the science of fire protection engineering. We applaud the committee in its efforts to maintain the national commitment to improved firesafety. The Society of Fire Protection Engineers offers its assistance now and in the future to maintain and advance that commitment.

Society of
Fire Protection Engineers

Advancing the Art and Science of Fire Protection Engineering

60 Batterymarch Street
Boston, Massachusetts 02110
617 482-0686

July 24, 1984

Dear Colleague:

As a leader in fire science and technology application, you are in a unique position to help the Society of Fire Protection Engineers. SFPE has a goal to advance the application of science and technology to solve the fire problem. To accomplish the goal requires that an inventory of research needs be developed, research needs as perceived by key individuals such as you, not just SFPE.

By way of background, in 1979 the Society created its Educational and Scientific Foundation a not-for-profit corporation to expand the science of fire protection engineering in the public interest. While its resources are as yet limited, we feel that it is time to present the Foundation with a realistic research agenda.

Suppose the Foundation had a sufficient endowment to generate $300,000 to $500,000 of annual funds for fire research, both applied and basic within the private sector, academia, or government. This would be "new" money, not money which had been diverted from other uses.

The question we ask you . . . given new resources, what projects would you want to see accomplished?

With your answer in hand, together with answers from other professionals in the vanguard, the SFPE can develop a realistic research agenda which can link the goal of the Society with the mission of the Foundation.

Your response no later than August 22,1984 will be very much appreciated.

Address it to me . . .

Harold E. Nelson, P.E., President
Society of Fire Protection Engineers
60 Batterymarch Street
Boston, MA 02110

Thanks for you help.

Sincerely,

Harold E. (Bud) Nelson, P.E.
President

Mr. WALGREN. Thank you very much, Mr. Catanzano, we appreciate that very much on behalf of your organization and yourself with a good contribution to the record.

I understand we go then to Mr. Harris. Mr. Lund, you're joining in this statement, is that correct?

Mr. LUND. Correct.

Mr. WALGREN. Fine. Then we'll turn to Mr. Harris. Welcome to the committee, Mr. Harris and please proceed in whatever way you would like.

STATEMENT OF RICHARD W. HARRIS, DIRECTOR FOR PROGRAM PLANNING AND ADMINISTRATION, NEW YORK STATE OFFICE OF FIRE PREVENTION AND CONTROL, ALBANY, NY

Mr. HARRIS. Thank you, Mr. Chairman. Mr. Chairman, I first want to thank you and the committee members for inviting New York to participate in these important hearings. I am here to testify on behalf of State Fire Administrator, Frank McGarry, on behalf of the Office of Fire Prevention and Control in New York State.

The Office of Fire Prevention and Control is the office and an agency in New York State which has been designated by statute as the liaison with the U.S. Fire Administration and the National Fire Academy.

Since their inception, we have worked closely with the U.S. Fire Administration and the National Academy on such significant issues as fire data collection, planning for arson prevention and control, train-the-trainer programs and public education. I am here today to speak specifically on the impact of the President's budget proposal for the National Fire Academy and for the National Fire Administration.

Let me speak first about the Fire Academy. The programs provided by Superintendent Donovan and his staff have been of the highest quality; both the residential and field programs. We have encouraged New York State fire service to attend residential programs over the years and the State has fully utilized the train-the-trainer programs developed by the National Fire Academy. In fact, last year New York State fire service graduated over 4,500 participants in the U.S. Academy field training and train-the-trainer courses. We are very proud of this fact.

In New York State, in 1983, we were given the Outstanding Public Service Award by the Federal Emergency Management Agency, FEMA, because New York had the highest fire service participation in Academy field courses. Most recently the National Fire Academy is assisting us and the New York City Fire Department in the development of the Nation's first mandatory training program for fire-line supervisors. Beginning April 1, 1985, newly promoted fire officers in career departments throughout the State will be required to complete a 4-week training program certified by the Office of Fire Prevention and Control. And delivered by the New York City Fire Department. Last month over 150 firefighters from all over New York State traveled to Emmitsburg to participate in a special New York State weekend training program conducted by the Academy.

Basically, the working relationship established between New York State and the National Fire Academy has been one of close cooperation and mutual respect. But, I am concerned that the proposal to end the stipend program for students at the National Fire Academy will have a disastrous effect on the Academy and its future and place a severe burden on State training programs. As a residential facility the National Fire Academy provides considerable support to the State fire-training program. Not only does it provide top quality leadership and executive type programs, but they also include state-of-the-art technical training for fire service specialists. New York State encourages attendance at U.S. Academy courses and we have designed our State Fire Training Program so that there are no duplications of effort between New York State and the National Fire Academy. The elimination of the stipend program will put a severe burden on the New York State fire training program and New York State firefighters desiring to attend the top quality training programs now offered by the Academy. Now, because firefighters cannot afford to attend National Fire Academy Programs, State training programs will be severely stressed to fill the gap and provide training opportunities needed by firefighters and not currently available at the State and local levels.

The cost of student travel from New York to the National Fire Academy would be in many cases a personal expense for New York State firefighters. Many of them are already giving up significant amounts of their time and energies in community service by volunteering their efforts to provide fire protection. In New York State there are 1,750 volunteers and 112 career fire departments. We will now be asking many of these firefighters to incur significant financial burdens to maintain their expertise in this community service. And for a good many of them it will be asking them to assume the added burden of travel and lodging in addition to the financial loss from full-time employment that some have made to participate in the training. It is difficult enough to recruit firefighters in the voluntary sector, but then to tell them they must pay for the privilege of being trained to protect themselves and their community seems to me to be ridiculous. Much of the fire service is already donating its time, its energy and in some cases, its life to protect the public. It seems to be economically unwise in the long run, and at the very least ungrateful to require these public servants to pay, in many cases personally, for the privilege of serving the public. It seems to be a strong disincentive to the President's policy of encouraging voluntary Government service. I would urge this committee and all of Congress to reconsider this proposal to eliminate the stipend program. It is such a small amount in terms of its relative benefits, whereby the impact of the proposal can be disastrous to the State fire training program, as well as for firefighters personally.

Second, I would like to address my remarks to the issue of the National Fire Administration. Since its beginning, the National Fire Administration has provided a high level of excellent quality technical assistance to State and local fire service programs. In New York State we have taken full advantage of these resources to improve fire protection within the State. In 1976, New York was one of the first three States which began the National Fire Inci-

dent Reporting System, known as NFIRS, supported by the U.S. Fire Administration. In 1979 and 1980 the technical resources of the U.S. Fire Administration assisted in implementing New York State's highly successful Arson Prevention and Control efforts. The technical assistance received from the U.S. Fire Administration eventually resulted in programs which have reduced arson in New York State by 30 percent since 1980, and the impact still continues. I am not here today to discuss the total allocation for the U.S. Fire Administration, which I must admit falls far short of the 1973 recommendations of "America Burning." I am concerned, however, for the manner in which the U.S. Fire Administration is forced to utilize its existing dollars. In recent years there have been significant personnel cuts at the U.S. Fire Administration. The Administration was therefore required to move toward contractual arrangements for the delivery of services. On the basis of our almost 10 years of cooperation, we in New York State believe that the technical assistance and expertise of the U.S. Fire Administration were most effectively delivered when permanent staff are available.

In 1979 and 1980, while setting up the New York State Arson Prevention Program, permanent staff people of the U.S. Fire Administration provided continuity of service and expertise which was critical to our start-up efforts. They formed an efficient network, with an institutional memory, that enabled State and local programs to benefit from the experiences and experiments of others all over the Nation. Today we experience a lack of continuity and a weakening of this network of support. We would urge this committee to consider the U.S. Fire Administration's critical need for a stronger permanent staff, I repeat, a stronger permanent staff, to strengthen the programs of technical support and assistance on fire data, juvenile firesetters and public education. This would allow the U.S. Fire Administration to once again provide the on-going technical support to local programs it has in the past.

Once again, realizing that allocations are far below recommendations of "America Burning," greater flexibility in adding permanent staff would, in my opinion, provide effectiveness to the existing funds.

Finally, I would like to address the issue of fire research. Research into combustion and combustion toxicity has never been more critical than it is today. With over 80 percent of our citizens dying from combustion by-products and toxicity rather than from thermal effects of fire, I am appalled at the proposal to totally eliminate the Center for Fire Research at the National Bureau of Standards. The National Bureau of Standards and its Center for Fire Research has historically been looked upon as a place where objective, nonbiased research could be conducted. There is no alternative capacity in either the public or private sector that can undertake the amount and nature of basic research that is required today. There are no State or local Governments that are geared to provide this research and it is impossible to initiate research simultaneously at several State and local Government levels in a cooperative, nonduplicative manner.

Research in the private sector will always be covered by the mantel of—the possibility of bias, I may add, deservedly or undeservedly, depending on which private sector interest is supporting

the research. In my mind there is no viable alternative to the Center for Fire Research conducting toxicity and other fire-related research. I believe that the Federal Government can serve in no better way than by undertaking this research. This research has no immediate economic benefit in either the public or private sector and thus there is no immediate incentive to undertake it, yet it is the most critical research needed. Preliminary indications are beginning to destroy traditional assumptions on fire deaths. Asphyxiation is similarly imprecise and carbon monoxide poisoning, originally considered to be universally responsible for fire deaths, is now being found at sub-lethal levels in victims nonetheless dead. We obviously need more research and more knowledge in this critical area; if not to precisely determine what is really killing our people in fires, at least to improve the treatment of those 300,000 or more who are injured by fire each year.

I thank you for the opportunity to address you and that concludes my written remarks.

[The prepared statement of Mr. McGarry follows:]

Testimony of Francis A. McGarry

Mr. Chairman, Ladies and Gentlemen of the Committee, my name is Francis A. McGarry. I am State Fire Administrator for the State of New York. As State Fire Administrator, I oversee the Department of State's Office of Fire Prevention and Control. The Office is the agency in New York which has been designated by statute as the liaison with the U. S. Fire Administration and the National Fire Academy.

Since their inception, we have worked closely with the U. S. Fire Administration and the National Fire Academy on such significant issues as fire data collection, planning for arson prevention and control, Train-the-Trainer programs, and public education.

I am here today to speak specifically on the impact of the President's budget proposal for the National Fire Academy and for the National Fire Administration. Let me speak first about the Fire Academy. The programs provided by Superintendent Donovan and his staff have been of the highest quality; both the residential and the field programs. We have encouraged New York State fire service to attend residential programs over the years and the State has fully utilized the Train-the-Trainer programs developed by the National Fire Academy. In fact, last year New York State fire service graduated over 4,500 participants in U. S. Academy field training and Train-the-Trainer courses.

In 1983, New York State was given an Outstanding Public Service Award by the Federal Emergency Management Agency (FEMA) because it had the highest fire service participation rate in Academy field courses.

Most recently, the National Fire Academy is assisting us and the New York City Fire Department in the development of the nation's first mandatory training program for first-line supervisors. Beginning April 1, 1985, newly promoted fire officers in career departments throughout the State will be required to complete a four-week training program certified by the Office of Fire Prevention and Control and delivered by the New York City Fire Department. Last month, over 150 firefighters from all over New York State traveled to Emmitsburg to participate in a special New York State weekend training program conducted by the Academy.

Basically, the working relationship established between New York State and the National Fire Academy has been one of close cooperation and mutual respect. But I am concerned that the proposal to end the stipend program for students at the National Fire Academy will have a disastrous effect on the Academy and its future, and place a severe burden on State training programs. As a residential facility, the National Fire Academy provides considerable support to the State fire training programs. Not only does it provide top quality leadership and executive type programs, but they also include state-of-the-art technical training for fire service specialists. The New York State encourages attendance at U. S. Academy courses and we have designed our State fire training program so that there is no duplications of effort between New York State and the National Fire Academy. The elimination of the stipend program will put a severe burden on the New York State fire training program and New York State firefighters desiring to attend the top quality training programs now offered by the Academy. Now, because firefighters cannot afford to attend National

Fire Academy programs, State training programs will be severely stressed to fill the gap and provide training opportunities needed by firefighters and not currently available at State and local levels.

The cost of student travel from New York to the National Fire Academy would be in many cases a personal expense for New York State firefighters. Many of them are already giving up significant amounts of their time and energies in community service by volunteering their efforts to provide fire protection. In New York State there are 1,750 volunteer and 112 career fire departments. We will now be asking many of these firefighters to incur significant financial burdens to maintain their expertise in this community service. And for a good many of them it will be asking them to assume the added burden of travel and lodging in addition to the financial loss from full-time employment that some have made to participate in the training. It is difficult enough to recruit firefighters in the voluntary sector, but then to tell them they must pay for the privilege of being trained to protect themselves and their community seems to me to be ridiculous. Much of the fire service is already donating its time, its energy and in some cases, its life to protect the public. It seems to be economically unwise in the long run, and at the very least ungrateful to require these public servants to pay, in many cases personally, for the privilege of serving the public. It seems to be a strong disincentive to the President's policy of encouraging voluntary government service. I would urge this committee and all of Congress to reconsider this proposal to eliminate the stipend program.

It is such a small amount in terms of its relative benefits, whereby the impact of the proposal can be disasterous to State fire training programs, as well as for firefighters personally.

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In 1979 and 1980, while setting up the New York State Arson Prevention Program, permanent staff people of the U. S. Fire Administration provided the continuity of service and expertise which is critical to our start up efforts. They formed an efficient network, with an institutional memory, that enabled State and local programs to benefit from the experiences and experiments of others all over the nation. Today, we experience a lack of continuity and a weakening of this network of support. We would urge this committee to consider the U. S. Fire Administration's critical need for a stronger permanent staff to strengthen the programs of technical support and assistance on fire date, juvenile firesetters and public education. This would allow the U. S. Fire Administration to once again provide the on-going technical support to local programs that it has in the past.

Once again, realizing that allocations are far below recommendations of America Burning, greater flexibility in adding permanent staff would in my opinion provide greater effectiveness to the existing funds.

Finally, I would like to address the issue of fire research. Research into combustion and combustion toxicity has never been more critical then it is today. With over 80 percent of our citizens dying from combustion by-products and toxicity rather than from thermal effects of fire, I am appalled at the proposal to totally eliminate the Center for Fire Research at the National Bureau of Standards. The National Bureau of Standards and its Center for Fire Research has historically been looked upon as a place where objective, non-biased research could be conducted. There is no alternative capacity in either

the public or private sector that can undertake the amount and nature of basic research that is required today. There are no State or local governments that are geared to provide this research and it is impossible to initiate research simultaneously at several State and local government levels in a cooperative, non-duplicative manner.

Research in the private sector will always be covered by the mantel of bias, deservedly or undeservedly, depending on which private sector interest is supporting the research. In my mind, there is no viable alternative to the Center for Fire Research conducting toxicity and other fire related research. I believe that the Federal government can serve in no better way than by undertaking this research. This research has no immediate economic benefit in either the public or private sector, and thus there is no immediate incentive to undertake it. Yet it is the most critical research needed. Preliminary indications are beginning to destroy traditional assumptions on fire deaths. Smoke inhalation is no longer an acceptably precise cause of death. Asphyxiation is similarly imprecise and carbon monoxide poisoning, originally considered to be universally responsible for fire deaths, is now being found at sub lethal levels in victims nonetheless dead. We obviously need more research and more knowledge in this critical area; if not to precisely determine what is really killing our people in fires, at least to improve the treatment of those 300,000 or more who are injured by fire each year.

I thank you for the opportunity to speak here today and I will be most happy to respond to any questions of the committee.

Mr. HARRIS. Mr. Chairman.

Mr. WALGREN. Very good testimony. Yes?

Mr. HARRIS. I thank you very much. If I may I wanted to expand on a couple of items raised here and items raised by my colleagues.

Mr. WALGREN. Fine. We'd be happy to hear that and so please go ahead and we appreciate your direction.

Mr. HARRIS. I thank you. One of the things that we're doing in New York State is we're trying to control this whole issue of fire gas toxicity and the secretary of state, through our office, has made recommendations for data collection on the combustibility and toxic effects of furnishings and we also want to have filings and other requirements, but the bottom line is not much work in the country—not much work is being done in that area in the country and as we heard, through testimony this morning and testimony today, the fabrics and materials that are going into construction today are more lethal than in the past. The plastics and the hydrocarbons that are in many of the materials that are used for building today, we don't know what the synergistic effects or the effects of these materials are when they burn. So, that's why any research that can be done in that area is vital.

Additionally, earlier this morning some of our fire colleagues made reference to the fact that what is needed is a post-mortem protocol for fire victims. That's critical. What happens is in many cases there is no protocol or autopsy performed on fire victims. Recently, in New York State, in the community where I live there was a fire where a 71-year-old grandmother died while she was babysitting her grandchild of 4 years old, who died also in the fire and for lack of post mortem protocols and procedures to deal with that, there was no autopsy performed. The cause of the fire was not determined. The cause of death was never really established or determined. The body was removed by the time fire investigators and firefighters arrived. The procedures in tracking the victims were nonexistent. So, unless we can have a standard post-mortem protocol we really will not know what is killing fire victims. We all know 80 percent of the victims die from the toxic gases, smoke and other toxic fumes that are emitted as a result of fire, but we really don't know what's killing the people.

So, if I can just leave you with a thought and I have a copy of a report that we released, "Fire Gas Toxicity," certainly I will make more copies available for the committee, but I would like to leave this with you and this is evidence of what has to be done and what we are attempting to do in New York State.

Another issue that I touched on lightly in my formal testimony was the value of arson assistance, or I should say the arson technical assistance that was provided to us by the U.S. Fire Administration. In New York State we were very proud of the work that was done in that whole area of arson, as some of the statistics bear out and we're not satisfied with them as you know. We want to further reduce the incidents of arson, but what we have established in the State of New York, through the program that the U.S. Fire Administration helped us set up in 1979 and 1980, was task forces in each county in our State the value of the money that we invested in the task forces and of everything that occurred in 1978 and 1979 resulted in our getting a real big bang for the money. It cost us about

half a million dollars to establish those task forces, but the results were that in each county we have a body of arson experts that know their local problem and that those experts go beyond the traditional fire service and fire investigators and police investigators. There are into bankers and businessmen and community organizations that are on the local task force. We encourage that sort of mix. So, through that we were able to get many benefits. One is that we had the expertise and input from the professionals or the traditionals in the area of arson control, however we also were able to gain assistance from private sector people and community organizations where in some communities, we'll say an urban community, the local community organization, they know who's starting the fires, and investigators could go around for months or years and never really know who's starting the fires and all they have to do, sometimes, is speak to a local community organization, and obtain this information. These are the kinds of things and benefits that we got from the establishment of arson task forces throughout the State.

We have approximately 77 task forces throughout New York State and we have, as you know, 62 counties. All but two counties have arson task forces, and we have local task forces too that bring the number up to 77. So, we're very proud of all of the work that we've been able to do, and we believe in this program because it shows that there is a cooperation between industry and fire service and this whole marriage between the Federal Government and locals is like a wheel. If we look at the States as the spokes in the wheel and then we look at the section that completes the wheel as the U.S. Fire Administration, then we have a wheel that can turn and that can accomplish something. But, without the completion of that circle we only have spokes and they will break or maybe fall apart, so we need that continuity and that cooperation and that continuum. Thank you.

Mr. WALGREN. Thank you very much. Your points are well made and certainly sound.

I wanted to ask Mr. Harris, the—you have pretty extensive experience with training people at the Academy and bringing them back and having them trying to proliferate that knowledge on a statewide level or on a State level. Not all the people from a State as large as New York can go to Emmitsburg. Can you give us any view of how effective the in-State programs are versus going to Emmitsburg? Do you feel that the programs are as effective when they are delivered instate after there has been substantial contact with Emmitsburg?

Mr. HARRIS. Absolutely. In fact before I left to come here for this hearing, Mr. Chairman, I spoke to the gentleman who heads our training program and one of the things he said is, "Rich, the big problem we have is you want to be selfish about it," and I know this, but he really wanted to emphasize it while I was on my way to send me with a message to you. He said that our instructors can't take advantage of the program as much as we'd like to because of the fact that the program is underfunded as it is. It shouldn't be cut back. But our academy and our New York State instructors, many times they are turned down and many times they would like to take advantage of the courses because that

builds their expertise, and then they're able to go back and give more to our people.

Mr. WALGREN. So we need more in-house capacity at Emmitsburg just to reach the instructors, as such, and they will then continue to transfer that training back in the State.

Mr. HARRIS. Yes.

Mr. WALGREN. The—the public education component of your New York State effort, you're in an office of Fire Prevention and Control; how much is prevention and how much is control?

Mr. HARRIS. Well, I would like to say 99 percent of our work is prevention. That, in fact, if I may digress a bit, Mr. Chairman, is one of the reasons why I joined the Office. I was a firefighter for 18 years in New York City and experiencing much of the suppression aspects of firefighting, and one of the things that I personally longed for was to see much more emphasis placed on prevention. And our Office's mission is prevention. Obviously then, when that fails, then you have to move toward mitigating the effects of fire and control and suppress, but our Office basically provides technical assistance and training, and the emphasis on the technical assistance and training that we provide is to prevent, so public education is in a sense integrated and included in most of our technical assistance program, particularly with our arson program. Just to put it in perspective for you, how we help with suppression is after the fact of an arson case we would have our arson technical assistance personnel at the Office. They are available to assist local investigators determine the cause of a fire; that's the way we would help. Further, in New York State, as in many other States, as you know, we have a mutual aid agreement, where in the event of a fire—we have a statewide fire mobilization mutual aid plan and that plan, in a sense, is implemented when we have the need to deal with suppression aspects of fire. And our office's role is coordinating that. An example would be if we had a county that had a major explosion or they had a petroleum plant that was on fire and that local fire department, that entire county, their resources were strained and they could not handle it, then they go to the next adjoining county and if they still can't handle it. Our Office would help them coordinate activities. They would contact our Office and we would implement the State's fire emergency mobilization plan. At that point, through our fire reporting system and other systems that we have for collecting data, we then would—for example, say you have a large petroleum fire, as I cited in my example; they need foam to control the fire. What we would help do is identify localities that have foam and then set up a system where they could deliver foam to the needed locality.

But, to go back to your original question, the primary effort on our end is really in the prevention area and education.

Mr. WALGREN. Mr. Catanzano, from a non-engineer standpoint it's a little difficult to appreciate a lot of the technical base of what we do in the Center for Fire Research and I think we can appreciate the potential of modeling and that sort of thing and the ability of computer programs, and I think we can appreciate the ability to have a research center identify the toxic effects of gas and some of these intersynergistic relationships. I just wanted to underscore the role of the Society of Fire Protection Engineers and you have 3,000

some members, and by and large are they are industry-based people and therefore would have an industry focus, wouldn't they? They would have a fire protection role within their jobs, as it were?

Mr. CATANZANO. I think we have range of fire protection engineers, some in industry, some in insurance interest, some in research, some in Government. I believe Mr. Lund may have some statistics for us.

Mr. WALGREN. I'd be interested.

Mr. LUND. Thank you very much. In terms of the Society of Fire Protection Engineers and where its members make their livelihood, we find about 15 percent of them on the consulting side of things offering their services to industry to help CARE facilities and the like of that. And roughly another 13 percent are involved with industry per se and we talk about ferrous and nonferrous, automotive industry, paint and varnish and that sort of thing, and about 35 percent are involved with the insurance industry rendering advice and counseling to the insurers, which could come from any one of those groups I just mentioned. Then we have a significant segment, about 5 or 10 percent, that's involved with Government, primarily with the Federal Government, but also with the State and at the local level.

One of our growing areas tends to be fire protection engineers becoming involved with the fire services at the local level and we find this a very healthy move.

Mr. WALGREN. OK, but it's pretty clear in an organization like that you're not able to exist in a way that you would be doing the things that are done by the Center at this point in any real way.

Mr. LUND. For an engineer to function in his chosen vocation he needs the science and the technology of that particular discipline, and much of that science and technology in fire protection engineering eminates from the Center for Fire Research. It does come from other sources, but certainly the major portion does come from CFR.

Mr. WALGREN. Well, these days we get the argument that well, there are other organizations and even on a nonproprietary basis it would seem that some societies might be able to do some of these things, but organizationally certainly your organization is not in a position to have the structure and have the resources and the direction, the internal direction to do the kinds of things that are done at the Center for Fire Research.

Mr. LUND. That's a very fair statement.

Mr. CATANZANO. Organizations can't do that. We formed the organization to get that kind of information, so we do rely on those research projects that are brought back to us by way of seminars, memorandums, newsletters, this type of thing.

The fire protection research that may be going on in the private sector is brought back to us through this vehicle of SFPE also. We like to think of the fire protection engineer as the one who's going to prevent these fires and we've talked—we've listened all day, you know, on fatalities and destruction of property by fire and many of these things, fire suppression was touched rather heavily this morning. Fire suppression is needed, but once we've learned how to prevent that fire. Then our fire suppression services would be minimal if we can prevent the fire, so we look for the fire protection

engineer to provide us that type of service. And he needs the vehicle to work with. He needs the technology that he would get from the researcher. Modeling has done wonders for the fire protection engineer. We think of the fire protection engineer as that bridge between fire suppression and prevention and research. Smoke and management of smoke during a fire is a whole field in itself that someone must undertake. The response that we had from our—the people that were surveyed in our—that received our questionnaires, several hundred ideas were submitted on research projects that could be more tools for this fire protection engineer to give him that ammunition to prevent that fire, so that we can let that fire suppression team sit back in the fire station. We feel we need this research. It has to be federally funded because it is not available in the private sector.

Mr. WALGREN. OK, Mr. Boehlert.

Mr. BOEHLERT. I have yet to find the first person outside of OMB that favors the budget treatment for the Center for Fire Research. Are either of you gentlemen aware of anyone that might be? You don't have to respond.

Let me ask you, Mr. Catanzano, is your society an international organization?

Mr. CATANZANO. Yes, it is.

Mr. BOEHLERT. And do you have international free exchange of ideas and data and technology?

Mr. CATANZANO. Yes, through our society newsletters and bulletins.

Mr. BOEHLERT. So, we're learning from others. Are we advanced or are we behind the game in terms of—in comparison to other nations, and what we are doing in this area?

Mr. CATANZANO. We are behind.

Mr. BOEHLERT. Strictly a dollar and cents deal, do you think it is? Is it a shortage of personnel and money?

Mr. CATANZANO. Well, I'm not really sure.

Mr. BOEHLERT. Let me ask Mr. Harris, how does the Governor, our Governor, treat your office in the current budget?

Mr. HARRIS. Well, I'm pleased to answer that question. We've been very fortunate with this Governor. Our office requested an expansion of our arson program. By the way we recently released a report on our arson program and recommendations for future activities. In this report I use this as a prop, if you don't mind Mr. Congressman, that we made many recommendations in this report. This is going to be obviously given to the committee, and one of the recommendations was that we expand our efforts and technical assistance to localities when they're investigating the cause of fires, because you have to determine the cause before you can pursue anything as far as arson investigation is concerned. And that program was accepted completely by the Governor and is included in his budget. Further, what we wanted to do is provide arson grants to localities. We requested $2 million that will be given out, all of the $2 million, in other words, every dime goes to the localities. Our office manages it. We requested $2 million in our next budget for fiscal year 1985, 1986 as you know, fiscal year 1985–86 begins—April 1, and we got $2 million included in the Governor's proposed budget.

Mr. BOEHLERT. So overall how are you doing?

Mr. HARRIS. Overall We get excellent support from the Governor.

Mr. BOEHLERT. Well, let's talk in terms of dollars and cents, though. I love New York too, but——

Mr. HARRIS. No, I'm just——

Mr. BOEHLERT. The reason I say this is because in New York we have a $600 million surplus, unlike Washington, where we have a $200 billion deficit, and I'm very supportive of CFR, but I would like some encouragement that the States are living up to their end of the bargain, so can you talk in terms of specific dollars and cents? In a surplus budget, what is the Governor requesting for your office as opposed to what you have in the current year?

Mr. HARRIS. It's an increase. I can't give you the exact dollar amount. I would say it's an increase of—it's a sizable increase, Mr. Boehlert. I really can't give you a dollar amount. However, let me just put it in perspective. In previous years we have not always been this successful, whether we have a surplus or not and I think that demonstrates the commitment that we have in New York State and if I go back further, I'll take this a little bit further and clarify your question, since you come from New York. In 1979, 1980, as I mentioned, we started arson planning grants in New York State and the total cost of that program was half a million dollars, $501,000. In 1980, 1981, we asked for a million dollars in arson grants to localities and we got it. In 19—fiscal 1982, 1983, we asked for arson moneys to aid eight localities. We asked for $1 million and we got $2 million, so the support is there. And those were times when we did not have tremendous budget surpluses.

Mr. BOEHLERT. Sure. Just for the record, I would appreciate your providing those figures to the committee when you get to them.

Mr. HARRIS. It's in this report.

Mr. BOEHLERT. All right. Fine, because in my previous incarnation I was county executive in Oneida County and we set up one of the first arson task forces in the State of New York, and it's been very successful, and I commend you and what you're doing in your office in the State of New York because I think arson, particularly, is a very serious problem, and there has been dramatic improvement, as you have noted, as a result of what we're doing: In terms—particularly in terms of training of law enforcement officials and volunteer firefighters as they deal with the actual scene, the maintenance of important evidence, so keep up the good work, but I just want the record to know that we in New York are doing our share, and then we're trying to do a little bit more, and you just want us to continue to help from Washington and I am very sympathetic to that plea.

Mr. HARRIS. Thank you.

Mr. WALGREN. Thank you very much. Nothing on this panel?

Ms. SCHNEIDER. Yes, I would like to ask some questions.

Mr. WALGREN. The chair recognizes Claudine Schneider from Rhode Island.

Ms. SCHNEIDER. I'm just curious to know which foreign countries are more advanced than we are in this area?

Mr. LUND. Well, as Mr. Catanzano in his testimony did mention, I think four countries. We mentioned Canada, Sweden, Japan and

the United Kingdom. There is some very significant work that goes on in Sweden at the University of Lund, as a matter of fact.

Ms. SCHNEIDER. I wonder what the cost benefit analysis might be as the United States versus other countries. and perhaps, if you could supply this subcommittee with that information, I think that that would be useful ammunition in them making a conclusion. Not being a member of this subcommittee, I'm taking the audacity to make such a request, but I think it would be useful.

Mr. LUND. We'd be pleased to furnish it. Certainly.

[A letter from Mr. Lund follows:]

Society of
Fire Protection Engineers

Advancing the Art and Science of Fire Protection Engineering

60 Batterymarch Street
Boston, Massachusetts 02110
617 482-0686

April 8, 1985

Early Green
Committee on Science and Technology
Suite 2321
Rayburn House Office Building
Washington, DC 20515

Dear Ms. Green:

As requested, we are pleased to respond to the request for additional information contained in the transcript of the hearing of the sub-committee on Science Research and Technology, chaired by Representative Walgren on March 21.

The request was for additional data relating to the cost/benefit of fire research in the U.S. as compared to other nations of the world, and particularly Japan, Sweden and the United Kingdom.

As we have tried to assemble the data we are finding that it is rather difficult to come by in a limited time frame. Not alone are there currency differences but their is a mix of private and public funding and intra governmental transfers which tend to cloud the data.

However, we are making some progress and are in contact with key knowledgeable members of SFPE in the above mentioned countries. As soon as meaningful data is developed, it will be forwarded to the subcommittee staff for their use. As you can understand, we are trying our best to seperate opinion from hard data.

We appreciate the opportunity to offer additional commentary.

Sincerely,

D. Peter Lund, CAE
Executive Director

cc: C. Browne
H.E. Nelson
S. Catanzano

Encl.
/j

Ms. SCHNEIDER. Thank you.

Mr. WALGREN. The subcommittee would be certainly interested in exploring that. Well, on behalf of this committee, thank you very much for your time and effort and your contribution to the record. We appreciate it very much.

The—let me call the next panel and also recognize the other members who are not directly members of this subcommittee, but who are interested in the area and have special relationships with some of the witnesses and we—we are very glad that they would come and join us. So, if the panel would come forward. Fred Ringler, the administrator of People's Firehouse in Brooklyn. Ernest Garneau, the executive director of Urban Education Systems in Boston and Martha Gruer, the Arson Program coordinator for the SWAP Program in Providence. We are joined by Bill Green of New York and Steve Solarz someplace here, Steve, and Claudine Schneider and we'd be happy to have you folks—why don't I recognize each of you first—and we would be pleased to receive any thoughts you might have or contributions you might like to make to the record. Mr. Solarz.

STATEMENT OF CONGRESSMAN SOLARZ OF NEW YORK

Mr. SOLARZ. Thank you very much, Mr. Chairman. I will be very brief. Let me say first of all that I see more clearly now than ever before that I made the wrong decision when I asked to go on the Foreign Affairs Committee 11 years ago. I say that because last year I was privileged to present Fritz Ringler to the Subcommittee on Housing and other various Federal agencies in their subcommittee room in the Capital and I noticed pictures of naked people all over the walls and other interesting frescos. I come here today, I see these spectacular photographs. In the Foreign Affairs committee room all we have are blank walls to look at, in the midst of dull hearings there's no alternative but to listen to the witnesses, whereas here you have all these things to divert your attention and entertain you. However, I can assure you that today's witness will not be dull and I really came, not so much to scout out the scenery, but to present Fritz Ringler to you. He is the executive director of the People's Firehouse in Brooklyn and, Mr. Chairman, I must tell you, this is one hell of an organization. They were established in 1975 in the midst of the fiscal crisis in New York when the city in its wisdom attempted to close down a local firehouse in the North Side section of Brooklyn, which the residents of the neighborhood furiously resisted temporarily occupying the firehouse until the city came to its senses and recognized that it could not close that facility down without jeopardizing the safety of the people of the neighborhood.

Since that time the People's Firehouse has constituted itself into one of the finest and most effective community-based organizations in the entire country and they have become deeply, intimately, actively and effectively involved in efforts to promote community based anti-arson programs. They've received funding in the past from the fire administration. One of their concerns, which I think you'll hear about today, is that 6 months into the fiscal year or almost that we find that the grants for community-based anti-arson

programs have not yet been awarded and that they, and other organizations are deprived of the knowledge they need to continue functioning effectively, but my impression has been, over the years that I worked very closely with them, that they have some very, very creative ideas how we can best go about in this country, dealing with the problem of arson, which is destroying so many neighborhoods throughout the Nation. I'm really pleased that you're going to take some testimony from them today. This is not a pro-forma introduction, it's something that really comes from the bottom of my heart. I mean it very sincerely. They do a marvelous job and I know that we cooperated very effectively in the effort a few years ago to see that some justice was done for the widow and family of Professor Chen Wen Chen, who was brutally murdered in Taiwan and who taught at Carnegie-Mellon in your area. I hope we can collaborate as productively and constructively today on the effort to help the People's Firehouse and its efforts to do something about arson at the local level.

Mr. WALGREN. Well, we are—our attention is well directed and we really appreciate your coming and underscoring their contribution and we want to be as helpful as we possibly can.

Mr. SOLARZ. Yes. Can we take some of these pictures on loan to the Foreign Affairs Committee.

Mr. WALGREN. Well, I'm afraid what you see around the walls may be all that's left of the United States foreign policy after awhile, so—[Laughter.]

Not through any fault of your own I would underscore, but rather through some of the directions I think the administration is going in.

I couldn't help but, among our friends here, I was driving across the Wilson Bridge this morning and on the radio they were saying—they had a clip from the President's State of the Union Address and that clip was that despite budget constraints we were providing record amounts for research and various kinds of scientific endeavors and I just hope the public does understand that record amounts are being provided in many areas of our national life and when we're asked to do things like tear the floor out from underneath things that are saving those people's lives that we have a reasonable question of why should record amounts be provided in some areas and literally nothing in others. That's just an aside. No particular reason.

Mr. SOLARZ. Well, I appreciate the opportunity to be here today and I thank—I compliment you for the attention you're giving this problem.

Mr. WALGREN. Well thank you for coming and underscoring this particular problem. Let me turn to the other members who are here, and I know that you have other commitments. I'd like to give each of you the opportunity to comment at the outset and then we apparently are going to hear the witnesses in a certain order, so please give us the benefit of your thoughts and whatnot and then we will turn to the witnesses as a panel as a whole instead of going sequentially through.

STATEMENT OF CONGRESSMAN GREEN OF NEW YORK

Mr. GREEN. Thank you very much, Mr. Chairman. It's my pleasure to introduce to you and the other members of the subcommittee your next panel of witnesses, Mr. Fred Ringler, Mr. Ernest Garneau and Ms. Marty Gruer, representing community groups in Brooklyn, Boston, and Providence respectively, that are engaged in significant anti-arson work.

I first met Fred and Ernie nearly 2 years ago when FEMA first started putting to use the money that our HUD and Independent Agencies Appropriations Subcommittee had provided for FEMA to use in anti-arson efforts. Since that time Fred and Ernie have emerged as major national spokesmen on the issue of arson and have appeared before our subcommittee testifying for continuation of the community based anti-arson program and for funds to create a public/private partnership to expand anti-arson efforts into the private sector and allow the program to become self-supporting. And it was when Mr. Solarz appeared before our subcommittee that he saw the mural on the wall to which he referred a moment ago.

As you'll no doubt hear, the efforts of these witnesses and their community groups to deal with FEMA have been very frustrating for them, and I think you're aware of some of the troubles at FEMA that have created that situation. However, each of them brings to this hearing a strong record of community work in this field. Just to tell the story of my city of New York, arson and the homelessness it often creates have become one of the city's major problems. Fred Ringler and the People's Firehouse, in conjunction with community groups in my district and in the other congressional districts in the city, are engaged in an ongoing battle to alert tenants to the possibility of arson, to educate them as to what they can do about it and to educate our civic leaders as to how the city can help combat this plague. Mr. Chairman, arson is a very real problem in cities around the country, and these three witnesses are well qualified to speak on it and how best we can address the problem on a Federal level. I know their testimony will be valuable to the subcommittee and I commend you for holding these hearings on this important subject.

Mr. WALGREN. Well, thank you very much, Bill, for coming by. I appreciate your interest in it and we look forward to trying, on our level, to recommend some things which you can pick up in your committee and provide the money.

Mr. GREEN. Thank you very much, Mr. Chairman.

Mr. WALGREN. Thank you very much, Congressman Green, for coming by. And third, although more directly related to this committee because she serves on the full Science and Technology Committee, Claudine Schneider from Rhode Island. Welcome to the subcommittee.

STATEMENT OF CONGRESSWOMAN SCHNEIDER OF RHODE ISLAND

Ms. SCHNEIDER. Thank you. Marty Gruer is one of my constituents who is probably one of the most effective leaders in helping to stop arson in many parts of the country. I can brag a little bit.

These New Yorkers were stealing the show, but we in Providence, under the leadership of Marty Gruer as the coordinator for the arson program for an organization known as SWAP or "Stop Wasting Abandoned Property." That is an organization that has been involved in homesteading, essentially promoting the purchase and rehabilitation of vacant houses. But Marty, in particular, has been responsible and her group has been responsible for reducing arson in the city of Providence by 31 percent since their inception in 1976. And, this dramatic decline in arson is really significant and has been noted by not only the residents of Providence, but people throughout New England. She, herself, has been involved in drafting two important anti-arson laws effecting insurance disclosure and also municipal tax liens, which were ultimately adopted by the city council. She's also developed, in cooperation with the mayor's office, a city arson prevention unit, which is composed of three fireman and also three policemen. And, in addition to that, she's been involved in designing a new, more efficient process to board up some of the vacant buildings, and this particular process has since been adopted by the city building inspector. So, there are a number of good specifics, and I hope my colleagues will ask her some of these specific questions that perhaps will go into the record and we can generate nationwide, because Rhode Islanders are always proud when our ideas can be picked up and utilized across the country.

But, it's a delight for me to welcome Marty. I regret that I cannot stay to hear your testimony because we're having a hearing right down the hall here and I'm the ranking Republican on that committee, so I have to go carry my weight for a period of time down there. So, welcome, happy you're here and Mr. Chairman, thank you for holding this hearing and thank you for being so supportive of what is a very worthwhile program.

Mr. WALGREN. Well, we appreciate your witness coming and contributing to our record and thank you for underscoring her presence in this process. Let's start out then with Martha Gruer, arson program coordinator for "Stop Wasting Abandoned Property" from Providence, RI. Welcome to the committee. And as I said before, although it might not have—depending upon who was in the room. The written statements can be made and are made, as a matter of course, part of the record without more and you feel free to underscore the points that you'd like to make in whatever way you feel most effective. And it helps if you would draw our attention as directly as you can to the points that you feel should really be made strongly.

STATEMENT OF MARTHA GRUER, ARSON PROGRAM COORDINATOR, STOP WASTING ABANDONED PROPERTY [SWAP], PROVIDENCE, RI

Ms. GRUER. OK. Thank you for having me here. I will summarize my written statement as best as possible and get on to the recommendations that I have for the committee.

Basically, as was said, SWAP is a homesteading organization. Since 1976 our Homesteading Program has sold 413 buildings, which has generated over 850 newly renovated units. In that time

we've also been able to leverage over $4 of private investment for every public dollar that was invested in our projects.

The way we got into fire and arson prevention was in 1980 when our group did an extensive evaluation of our program. We were finding that for about every house that we renovated in rehab, one or two on the block burned and we were sort of stymied in our efforts to revitalize the city. The conclusion of that evaluation was that arson was a major problem in the neighborhoods we were working in and we needed to begin addressing it. We were able to do that in 1981 by a small grant from Old Stone Bank and through our general operating funds. We began our program in very simple, basic anti-arson tasks such as was mentioned earlier on the Board-Up Program, securing high-risk buildings more effectively. We also initially got cooperative relationship going with Rhode Island fair plan, so that as we knew a high-risk situation was developing we could call them and let them know just in case they insured it, they could go out and inspect the building. We were also able to get on their board of governors and also on their arson committee, which helped with communication of the whole insurance problem.

The next step that we took was as we were learning more and more about our problem and what the high-risk indicators were we realized that we had one arson investigator for every fire and we were having about an arson fire a day. One arson investigator for the whole city, for the whole year, who had to investigate, you know, an arson fire a day and we were able to convince the mayor of Providence at the time, Mayor Cianci, that we needed an arson prevention unit. We also did a lot of research on what would be the best type of prevention unit for our area and for the type of problem that we had and he, about 3 months later, authorized the creation of the unit, which is as was mentioned, three firemen and three policemen.

We also have worked very hard in legislative areas in terms of the insurance disclosure and also the tax lien to provide the city with greater tools they could use in fighting arson. We then decided to develop a more sophisticated approach to the problem and we've approached various organizations by developing a computerized early warning system. We were successful in that we got the Ford Foundation to pick Providence as one of the five cities in its AIMS project and we're now developing that project, which will be able to target, through public information in the city halls, properties that may be developing as an arson problem and then intervene in those problems.

This fall to continue our progress we held a 2-day conference and we invited all the arson unit members, the community members, the industry members, the banking industry also, and we went over four or five profiles of arson in the city of Providence, actual profiles, and we developed from that conference a long list of recommendations of what to work on in the up-coming years. Those included working toward a more effective housing court, getting a two-tiered insurance application similar to New York and Massachusetts, which I have to say is going to be heard next Tuesday at the State house, and we also—we also—one of the other recommendations was that there was a need for a greater community awareness of the whole problem.

To sum up what I'd like to recommend to the committee is that through our work and through the conference we held in September, it became very apparent to us that fire is not only a people problem, it's a housing problem as well. That local housing policies and insurance and banking policies can create a climate for fire inadvertantly and that those need to be looked at and addressed and that the best method for doing this would be a partnership such as we've been able to develop on the local level. Our statistics, not only have we reduced the arson rate, we've reduced the fire rate by 37 percent over the past 3 years, so I think we've got a good track record saying that this method is effective and does work. My recommendation to this committee is that as it looks at means of solving America's fire problems it seriously considers prioritizing means of encouraging local partnerships between Government, community groups and private sectors as one of the chief objectives. Also I would recommend that as you look at the authorization act that you consider the formation of a partnership on a national level without mandating an effort of this type local efforts will have a hard time being sustained.

I'll defer to the rest of the panel.

[The prepared statement of Ms. Gruer follows:]

Testimony of Martha Gruer

Testimony of Martha Gruer, Arson Program Coordinator at Stop Wasting Abandoned Property, Providence, R.I.

Presented to the Subcommittee on Science, Research and Technology on March 21, 1985.

Mr. Chairman and Members of the Committee,

S.W.A.P. (Stop Wasting Abandoned Property) is a nationally recognized urban homesteading program. We were created in 1976 by community leaders who were seeking a way to stop abandonment in Providence. Our long range goal is the preservation and rehabilitation of abandoned houses in the city. The realization of this goal will not only make Providence a more desirable city to live in but also decrease the enviornment for further arson and abandonment by renovating vacant, high risk buildings.

In order to achieve this goal we first developed a homesteading program that helps energetic people without much money purchase and rehabilitate vacant houses. Since 1976 our homesteading program has sold 413 buildings, resulting in at least 850 newly renovated housing units. S.W.A.P. has obtained $1,200,000 in federal grants to assist homesteaders. In return these funds have leveraged $2,000,000 in conventional mortgage loans, $2,000,000 in homesteader's labor, $2,200,000 in material purchases (from local suppliers) and $2,200,000 in construction jobs (mostly to small, local or minority contractors). In short, S.W.A.P. homesteaders have leveraged over $4.16 of private investment for every public dollar invested in a project.

Our homesteading program not only effectively leverages private funds but it has also allowed homesteaders to use their own labor (sweat equity) to keep the cost of repairs affordable. In fact S.W.A.P.'s per unit rehab cost last year was only $7,351 per unit, well below the per unit cost of $14,815 of similar local, publicly funded projects. Our cost effective self-help approach to housing rehab was recently recognized in a nationwide competition sponsored by the Enterprise Foundation for innovative low-cost rehab programs. 90% of S.W.A.P. homesteaders are first time buyers, 90% are low to moderate income according to HUD guidelines and 2/3 are minority.

Another program we have developed to achieve our goal of halting abandonment is the creation of the Providence Anti-Arson Coalition. In the fall of 1980 the S.W.A.P. Board, staff and community went through an extensive analysis of the organization and its progress in achieving its goal of neighborhood revitalization through homesteading. One of the conclusions at that time was that arson had become a substantial problem in the Providence area and was one of the chief

reasons the number of abandoned properties had not decreased despite S.W.A.P.'s numerous sales and renovation successes. Based on this conclusion S.W.A.P. decided to develop a city-wide anti-arson program. In 1981, funded by a small seed grant from Old Stone Bank's Charitable Trust and supported by S.W.A.P.'s general operating funds the organizing of the Anti-Arson Coalition began.

During the first year of the Coalition's efforts we began with some fundamental anti-arson projects. We approached a variety of organizations and neighborhood leaders from those areas of Providence that most heavily suffered from arson and asked them to join the Coalition effort. We developed a cooperative relationship with the R.I. Fair Plan and obtained representation on their Board of Governors and Arson Committee. As information about potential arson situations is reported to S.W.A.P. by Coalition members and community people, this information is reported to the Fair Plan. If the property is covered by Fair Plan insurance, inspectors are sent immediately to evaluate conditions and cancel insurance if advisable. Later that year we designed a new, more efficient board up program and presented it to the city to use in securing vacant buildings. Along with helping the city streamline its board up program we also worked with them to develop a stencilized message instructing neighbors to call police if vandalism begins or the building becomes unboarded. This was a great step towards creating neighborhood awareness and intervention in the problem of arson and vandalism.

During our second year of arson prevention work we concentrated on arson-for-profit issues. As awareness of high risk indicators grew and our ability to target arson prone properties increased it became evident that a more aggressive municipal effort on arson prevention was needed. At this point the Coalition began advocating with city officials for the creation of an arson prevention unit. After several meetings and the passage of two important anti-arson laws, insurance disclosure and the municipal tax lien, then Providence Mayor Vincent Cianci approved the formation of a new Arson Prevention Unit to be composed of three fire personnel and three police personnel.

With these elements in place S.W.A.P. began to examine ways to better hone its skills at arson prevention through the development of a computerized early warning system. In 1984 we were successful in being selected as one of five cities to participate in the Neighborhood AIMS program sponsored by the Ford Foundation and the Insurance Committee for Arson Control. (I.C.A.C.) This program will not only increase our ability to target high-risk properties but has also provided an on-going forum for communication among the city departments, community groups and insurance industry representatives concerned with arson and fire prevention.

This fall, as part of our effort to continue to examine innovative and effective methods of arson and fire prevention S.W.A.P. sponsored a two-day conference on arson prevention ideas. This conference was funded by a small grant from the National Trust for Historic Preservation. By examining five various profiles of arson cases that had occured in

Providence and encouraging the participation of all those sectors of society that are affected by fire we were able to produce a substantial list of ideas and recommendations towards further prevention work. These recommendations range from the implementation of a two-tiered insurance application to the devlopment of a consistent, effective housing court. Participants also felt that there was a need for continuing public outreach on the issue of arson and fire prevention along with expanding the efforts of the computerization of city records so that information can be more readily available for prevention and planning purposes.

A recent grant from U.S.F.A.'s community based anti-arson program is helping S.W.A.P. and members of the Anti-Arson Coalition to implement those recommendations. Our method for meeting our goals will continue to be the same as those that have worked so well in the past, the forming of coalitions and the encouraging of participation of all those sectors involved in the fight against fire. Our experience has shown that it is such local partnerships and involvement that ultimately nets results. In the past three years incendiary fires in Providence have been reduced 42%, from 369 in 1982 to 216 in 1984. Total fires have been reduced from 1150 to 730, a 37% reduction.

These results reinforce our opinion that the most effective method of reducing not only America's arson problem but also the total fire problem is to involve each sector of society that is affected: the community, federal and local government and private industry.

Fire is not only a people problem, it's a housing problem as well. The fire profiles we examined this September clearly illustrated the large degree to which local housing policies, insurance and banking industry practices and lack of community awareness can directly affect the arson and fire climate in a city. It is also very clear to us, having what we feel to be one of the finest fire departments in the country, that America's fire problem is not in suppression, it is in prevention. Truely effective prevention must include all the players. Without the support of local government to develop well thought out housing plans and laws and encourage interdepartmental communication, incentives for arson are created, not prevented. Insurance and banking industries must also join in the effort to analyze how their means of doing business may unintentionally create a climate for fire. Community groups and housing organizations must mobilize their neighborhoods to increase the public awareness of the type and nature of the fire problem that may exist in their area. From that point they can then develop programs that deal directly with decreasing the risks of fire. Last, but perhaps most important, the federal government must play an active role in facilitating these partnerships on both a national and local level.

We in Providence have been fortunate to receive such support, not only from USFA but also from our congressional representatives and private foundations such as Ford. That support is clearly beginning to show results. With continued support we will be able to not only bring Providence's fire problem under control but prevent it from reemerging.

My recommendations to this committee is that as it looks at ways of solving America's fire problem it seriously considers prioritizing means of encouraging local partnerships between government, community groups and the private sector as one of its chief objectives.

I would also recommend that as the committee looks at USFA's Authorization Act that they consider the formation of such a partnership on a national level. Without the mandating of an effort of this type at a national level, local efforts will flounder and be unable to be sustained over time.

45-946 O—85——6

Mr. WALGREN. Well, thank you very much for your testimony.

STATEMENT OF FRED S. RINGLER, ADMINISTRATOR, PEOPLE'S FIREHOUSE, INC., BROOKLYN, NY

Mr. RINGLER. I'd like to thank the committee for giving me this opportunity to speak today. And my intention in coming before the committee is to try to bring to you a number of new perspectives from the community organizations that are out there involved in arson, and fire prevention. Congressman Solarz was very kind in his introduction and I'd just like to add a few things to bring you up to date on some of the areas that the People's Firehouse is involved in.

Basically we're involved in five major areas of community development activity. These includes housing, arson, and fire prevention, commercial revitalization, economic and industrial development and providing community services to residents in our target areas. Within this context we manage 190 units of city owned housing. We, the Firehouse itself, has rehabilitated many of these properties and sold some of these properties to tenants as low equity co-ops. We provide a lot of assistance to other tenants living in privately owned buildings, as well as small homeowners and within the context of this type of assistance we provide fire prevention education to people who live in these buildings.

The community that I work in is an old, older urban community. Many of the structures were built at the turn of the century and we face a very serious, both a very real serious fire problem that exists today and a potential for a much greater fire problem, and that is one of the reasons why my organization has taken such a strong position in addressing the fire issue in the community.

Over the last 10 years my organization has committed itself to the reduction of fires and resolving neighborhood problems. The approach that we've taken in trying—in attempting to do this has been one of a community development approach. This community development approach assumes direct intervention on the part of community organizations and the use of various community development strategies to reduce the conditions and incentives that lead to arson, fire in general and deteriorated housing. The goal of these strategies is to actively involve neighborhood residents in stabilizing and revitalizing their community by developing programs that encourage local participation. Within the context of community based arson fire prevention programs, direct intervention, outreach, public education, research, technical assistance, housing management and development strategies are critical components to a successful program. Community based approaches to preventing arson fire generally view the fire issue from three distinct perspectives. These include fire and arson from a fire suppression and investigative standpoint, fire as a housing or infrastructure problem and fire and its impact on neighborhood stability, safety, improvement, and citizen involvement. From the standpoint of suppression, it is universally acknowledged that fires must be suppressed quickly and effectively in order to reduce injury and property damage. However the second perspective used fire as a housing problem and dictates certain housing intervention development strategies to ad-

dress the incentives or conditions which result in fire, arson, and building decline. Viewing fire as a housing or infrastructure problem and issue defines the problem as both a structural and behavioral problem that impacts on management, development, public educations, human, and economic issues. This perspective views the issue of fire as both a cause and effect of housing deterioration and community decline. This perspective sees most fires as being preventable given adequate resources, commitment, consistency, citizen involvement, and the development of local public/private sector partnerships. Since housing is probably the most important community resource and the most basic community service, the prevention of fire is extremely important from an overall community stabilization standpoint and those life safety issues that concern community residents.

The third perspective views the issue of fire from the standpoint of its impact on neighborhood stability, safety and revitalization. Since by their very nature community organizations grew out of neighborhood or community issues, it is a goal and responsibility of most CBO's to address the general issues of neighborhood stability, safety and revitalization. Community organizations are in a unique position to have an overall community perspective and perception about community problems such as fire and arson. They also have first hand knowledge of the problems and issues that impact on the community and its residents. This comes about as a result of organizational contact with the residential, business, banking, insurance, governmental, and political sectors, which all impact on the economy of a community.

The People's Firehouse believes that the development of these types of local partnerships are necessary for the prevention of fire and an important component of any community based Arson or Fire Prevention Program. Historically those community based organizations that were successful in developing local partnerships also have been successful in reducing fire, overall community decline, and housing deterioration.

The prevention of fire, when viewed from each of these perspectives is particularly important to a community because once buildings are lost everyone loses. Individuals risk injury, death, the loss of their homes and property and at the same times the city loses its tax base and the local economy erodes resulting in the loss of jobs, the loss of services, disinvestment, and the deterioration of the community infrastructure.

The perceptions of the individuals living in a community or working in a community has a substantial impact on the ability of that community to remain stable. Perceptions of a deteriorating or declining community can impact on the willingness of community residents to invest in that community, improve their property and remain there. Negative perceptions of a neighborhood or community also have an effect on the short and long terms results of investment decisions made by financial institutions such as banks and insurance companies and their willingness to invest in a community. Perceptions of a declining community will have a substantial impact on the investment decisions made by these financial institutions.

We've been involved for 10 years as a community organization in the arson fire prevention issue, and for 10 years we have been out there trying to develop resources to support both our program and programs around the United States. This has not been an easy task and to some degree my organization has been successful because we've looked to unique ways of developing these resources. One of the critical aspects and one of the reasons for the success of my organization in leveraging dollars from both the public and private sectors has been the fact that we have been fortunate to have support from the U.S. Fire Administration in past years. While the amounts of funds that we've received from the Fire Administration have been relatively small in comparison to the our overall budget, the leveraging capacity and ability—our ability to take these funds and go out there and leverage it with other private sector dollars has been tremendous. Now, we appreciate that support that we've gotten over the years, however, we also understand that there are certain structural problems that we perceive with the Fire Administration that I would like to just briefly discuss here.

One of the areas that I believe that should be focused on is the concept of the Federal task force that I believe has not been active over the last couple of years, and I think is critical, both from the standpoint of coordinating various agencies and their responses to fire and arson and so that the pieces of the pie that they're responsible for and also in terms of overall dollars that are available to support different kinds of programs for both community organizations, the fire services and other organizations that are out there. We feel that within the context of the authorizing legislation that a couple of considerations should be given to strengthening the concept of the arson task force, the Federal Arson task force and that it should be mandated through the authorizing legislation that an active task force be developed. I know that there are a number of bills that are out there that have been put before Congress, one of them is the Addabbo bill that stresses the importance of the task force concept. From a standpoint of leveraging dollars from other agencies, we think that it's critical and some of those other agencies that I'm talking about are agencies like HUD, HEW, some of the law enforcement agencies that are out there that have resources available to put into different types of programs and are basically, at this point, going untapped because really little effort is being made to approach them. So, this is one area that we're concerned with. One of the other areas that I'd like to address is, and I've heard numerous people today address the issue of the fire academy and I know we've been up to Emmitsburg and, you know, talked to many of the people from the Fire Administration about the academy. We think that academy does a fine job and, you know, we are very supportive of the things that go on there. One of the things that we're talking about, I guess one of the fundamental things that I'm talking about, is changing people's perceptions and changing people's perceptions about the issue of fire prevention and that includes involving local people at the local level and civilians in prevention efforts. And one of the things that I would like to stress is my feeling that it is extremely important to open up the doors of the fire academy to train civilians, not only training civilians that are out there actively working in the area of fire preven-

tion, but bringing in civilian people from different fields, the housing field, the construction field, the engineering field, lawyers, people that indirectly have an impact on what happens in terms of arson and fire and to bring those type of people, those type of resources in to train firefighters, so that they begin to develop a much broader perspective on the fire issue, so that we get away from the understanding that fire is just a suppression issue or that it's just a prevention issue. Then we begin to look at fire from the standpoint of it being a housing issue, a people issue, a community issue and, you know, I feel, you know, personally, that this is extremely important is we're going to, you know, move onward in the next 10 years and it's critical, I feel, for people like myself and other people that are out there to have the benefit of sitting down also with people from the fire services and discussing issues and understanding what some of the issues are from the fire perspective and as I said, also exchanging the, you know, having the feedback go the other way, so that people from the community and other fields can also exchange information with these people. So, I feel that this is a very important issue.

In closing I'd just like to say that the U.S. Fire Administration is critical if we are to have a focused national policy to prevent fire. The development of this policy should include a strong national arson strike force, which includes input from various, appropriate Federal agencies. It's purpose should be to develop programs, coordinate Federal resources and encourage research and development vis-a-vis fire. At a policy level the USFA should be mandated to establish working committees comprised of representatives of the various sectors, to assist in program and resource development. At a staff level I think that careful consideration should be given to identifying staff that is outside of the fire service. Those people that have administrative program management and fund raising backgrounds, they can assist in developing this overall perspective. And I believe that a balance must be reached between the suppression and prevention issues.

In closing, no one sector should control a National Fire Program dedicated to the prevention and control of fires in our communities. The perception that only professionals understand the fire problem is a myth that has been perpetuated for far too long. This type of perception must be eliminated to insure a truly integrated and effective approach to preventing and suppressing fire. This integration or partnership can be formed by reorganization of the U.S. Fire Administration and its authorizing legislation. The Fire Prevention and Control Act of 1974 is over 10 years old. During this period of time many innovative and life-saving programs have been developed by both the National Fire Prevention and Control Administration and the U.S. Fire Administration. During the same period of time we're no closer to eliminating the problem in this country than we were 10 years ago. Communities continue to burn. They are ravage by fire and deterioration. We have seen unprecedented destruction in urban and rural communities as a result of arson. We have seen viable housing lost to fire and deterioration, and as our housing gets older and our infrastructure gets older we can see an overall increase in preventable fires. It is now time to reflect over the next—over the last 10 years and to redefine the

missions, goals, objectives and operations of the U.S. Fire Administration. Technology is at the cutting edge of making great strides in preventing fires in the home. Community based organizations, we feel, community based organizations can have an important impact, an important role in this prevention effort. And I thank you.

[The prepared statement of Mr. Ringler follows:]

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ADAM VENESKI, Pres FRED S. RINGLER, Executive Director

Testimony Before the U.S. House of Representatives Subcommittee

on Science and Technology

Critique of the United States Fire Administration

Submitted By: Fred S. Ringler
Executive Director
March 18, 1985

PEOPLE'S FIREHOUSE INC.
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ADAM VENESKI, Pres. FRED S. RINGLER, Executive Director

AN ANALYSIS OF THE UNITED STATES FIRE ADMINISTRATION: A COMMUNITY BASED PERSPECTIVE

INTRODUCTION

The People's Firehouse Inc., a neighborhood based Housing and Community Development Company, has been involved in the arson and fire prevention /protection issues since 1975. The People's Firehouse began as the result of community residents rallying to stop the closing of Engine Co. 212 during the 1975 fiscal crisis and the subsequent New York City Fire Department budget reductions. Community residents were successful in reversing the policy decision to close Engine Co. 212 and it was reinstated after three years of negotiations with the City of New York. After this important and successful community effort, community residents formed a formal organization which was incorporated in December, 1977 to address other neighborhood issues and to monitor service delivery. Presently, the People's Firehouse Inc. is involved in five major areas of community development. These include housing, arson/fire prevention, commercial revitalization, economic and industrial development, and the monitoring of community service delivery. Lastly, the People's Firehouse has been instrumental in raising the issues of arson and fire prevention at a national level by providing technical assistance to both the public and private sectors throughout the U.S. This includes the development of a national network of Community Based Organizations (CBO's) which includes some 25 groups from around the United States. This network was invited to testify at the 4/84 Appropriations Committee, Sub-Committee on HUD and Independent Agencies budget hearings and was responsible for promoting the development of community based and public/private sector programs. Recently, the People's Firehouse Inc. received a Presidential Recognition Award from the Reagan Administration for its involvement in successful private/public sector initiatives and community development projects.

Over the last ten years, the People's Firehouse Inc. has committed itself to the reduction of fire and arson by the implementation of community development approaches to resolving neighborhood problems. This community development approach assumes direct intervention on the part of community organizations and the use of various community development strategies to reduce the conditions and incentives that lead to arson, fire in general, and deteriorated housing. The goal of these strategies is to actively involve neighborhood residents in stabilizing and revitalizing their community by developing programs that encourage local participation. Within the context of community based arson/fire prevention programs, direct intervention, outreach, public education, research, technical assistance, housing management and development strategies are critical components of the People's Firehouse arson/fire prevention model.

Community based approaches to preventing arson/fire generally view the issue from three distinct perspectives. These include fire/arson from a suppression/investigative standpoint, fire as a housing or infrastructure problem, and fire and its impact on neighborhood stability, safety, improvement and citizen involvement. From the standpoint of suppression it is universally acknowledged that fires must be suppressed quickly and effectively in order to reduce injury and property damage.

The second perspective views fire as a housing problem and dictates certain housing intervention/development strategies to address the incentives or conditions which result in fire, arson and building decline. Viewing fire as a housing or infrastructure issue defines the problem as both a structural and behavioral problem that impacts on management, development, public education, human, and economic issues. This perspective views the issue of fire as both a cause and effect of housing deterioration and community decline. This perspective sees most fires as being preventable given adequate resources, committment, consistency, citizen involvement and development of local public/private sector partnerships. Since housing is probably the most important community resource and the most basic community service, the prevention of fire is extremely important from an overall community stabilization standpoint and those life safety issues that concern community residents.

The third perspective views the issue of fire from the standpoint of its impact on neighborhood stability, safety, and revitalization. Since by their very nature community organizations grew out of neighborhood or community issues, it is a goal and responsibility of most CBO's to address the general issues of neighborhood stability, safety and revitalization. Community organizations are in a unique position to have an overall community perspective and perception about community problems such as fire and arson. They also have firsthand knowledge of the problems and issues that impact on the community and its residents. This comes about as the result of organizational contact with the residential, business, banking, insurance, governmental and political sectors which all impact on the economy of a community.

The People's Firehouse believes that the development of these types of local partnerships is necessary for the prevention of fire and an important component of any community based arson/fire prevention program. Historically, those community based organizations that were successful in developing local partnerships also have been successful at reducing fire, overall community decline, and housing deterioration.

The prevention of fire when viewed from each of these perspectives is particularly important to a community because once buildings are lost, everyone loses. Individuals risk injury, death, the loss of their homes and property. At the same time the city loses its tax base and the local economy erodes resulting in the loss of jobs, the loss of services, disinvestment, and the deterioration of the community infrastructure.

The perceptions of individuals living or working in a community has a substantial impact on the ability of that community to remain stable. Perceptions of a deteriorating or declining community can impact on the willingness of community residents to invest in that community, improve their property and remain there. Negative perceptions of a neighborhood or community are also effected by the short and long term results of investment decisions made by financial institutions such as banks and insurance companies and their willingness to invest in a community. Perceptions of a declining community, will have a substantial impact on the investment decisions made by these financial institutions.

For many years the issue of fire prevention has been the domain of the fire services who has historically been charged with suppression/prevention activities at the local level. As cities and rural communities began to feel the pressures of fiscal crisis' during the early and mid-1970's, other sectors became involved in addressing the fire issue. These sectors brought to the fire issue new perspectives for understanding why fires occur and how to prevent them. The community sector brought the housing perspective to the fire issue with an understanding of why residential buildings fall into decline and deterioration. This perspective is not new or unique, it is an analysis of the economic, social, and political realities that impact on the housing market and determine to what degree people will invest or disinvest in housing.

Unlike volunteer organizations which are usually single issued or committed solely to local community issues, CBO's like the People's Firehouse have committed themselves to housing management, maintenance, tenant/landlord advocacy, and development activities because of the inaccessibility of private investment and the failure of the private sector to adequately produce and maintain decent, affordable housing. Historically, most CBO's were formed as the result of a basic and fundamental failure of government to adequately address these and other issues. CBC's emerged in many communities as a citizen's response to community problems or governmental cutbacks which impacted on the delivery of services. In short, to resolve quality of life issues. Many of these organizations developed from single issued, volunteer/civic groups to multi-issued complex organizations managing large amounts of resources used for community development purposes. These organizations, while addressing complex issues of management, development, planning, and service delivery, developed public/private sector partnerships to facilitate neighborhood preservation, stabilization, and development goals. It is to the credit of these organizations that they have been successful in their efforts in spite of their under capitalization, diminishing governmental support, poor cash flow, competition for funds, lack of management skills, and limited access to credit.

Recently, there has been much discussion and emphasis placed on the development of local public/private sector partnerships. This concept has become significant in discussions about generating resources, linking various sectors together to accomplish a common goal(s) or

minimizing governmental support. The concept of partnerships which historically has been used to describe business relationships, has emerged as a "catch word" and priority of many public and private funding sources. This is largely due to the significance placed in the partnership concept by the Reagan Administration as a way to reduce public sector dependence on government funding sources. The partnership concept assumes that each sector comes to the partnership with certain resources, expertise, goals, objectives, and strategies. Linking various sectors has the effect of leveraging these resources to accomplish mutual goals and objectives. The concept of partnerships is not new and, in fact over the last decade, community based organizations have grown and accomplished community development objectives in partnerships at the local level. These partnerships have been formed with government, private foundations, private sector, banking and insurance sectors, the local business/industrial sector, and the community. Successful CBO's like the People's Firehouse, have developed public/private sector initiatives as non-profits, funnelling excess revenues back into community development activities. CBO's have also entered into partnerships with local government to engage in housing management, development, advocacy, research, outreach, and rehabilitation programs designed to reduce neighborhood decline, spur neighborhood investment, and prevent disinvestment.

Over the last ten years, these community based organizations have developed into neighborhood institutions whose goa's are to stabilize, revitalize, improve, preserve, and insure neighborhood safety and a positive quality of life. In short, CBO involvement in public/private sector partnerships has been dedicated to neighborhood infra-structure improvement, the provision of decent affordable housing, the maintenance of essential community services, and the safety of community resid nts.

HISTORIC RELATIONSHIP WITH THE UNITED STATES FIRE ADMINISTRATION

The People's Firehouse Inc. first established a relationship with the National Fire Prevention and Control Administration in 1978. At this time, the People's Firehouse approached NFPCA for technical assistance and funds to support its locally based fire prevention program. We were not successful in receiving assistance or support from the NFPCA until 1981. NFPCA's explanation for this gap in providing assistance was clear. It did not provide technical assistance or funds to community organizations and its services were targeted toward strengthening the fire services through research and development, developing media campaigns, and working with states and municipalities to develop local outreach and research programs. For all intents and purposes, the CBO's were shut out of receiving assistance until late 1980 into 1981.

During 1980 as the concern over our national arson and fire problem became prominent and as city's, state's, and the federal government sought new solutions to address the escalating local fire problem, the People's Firehouse re-established contact with NFPCA. At this time NFPCA was undergoing a reorganization and later became USFA. USFA became interested in the development of the Arson Information Management System and other proactive as well as reactive programs. The Arson Information Management System (AIMS) was originally developed by a community organization in Boston, MA and USFA made a major committment to develop it further. The People's Firehouse, in addition to other community based organizations, was asked to participate in the AIMS program and we were invited to attend approximately 7 AIMS meetings held throughout the United States. In 1981 the People's Firehouse was chosen by USFA as an AIMS site and was given a grant for $15,000.00 to develop a computerized data information system. In turn, the People's Firehouse leveraged the $15,000.00 into an additional $225,000.00 in City, State, Federal government, and private sector dollars. The People's Firehouse Inc. established its Arson Research/Outreach Center and developed arson/fire prevention outreach, research, and technical assistance components. The PFH Arson Data Information System is currently operational and used to target arson/fire prone properties and landlords located in the People's Firehouse's North Brooklyn target areas.

From 1982 to 1984, the status of the USFA was in question and it was de-funded by the Reagan Administration and re-funded as the result of Congressional support. One aspect of this Congressional support was the committment of the CBO's and their desire to maintain USFA as an agency that would coordinate efforts to stop fire nationally and provide technologies and assistance locally. During its re-organization, USFA was re-staffed by members of the fire service community and moved from its central location in Washington, DC to its present location at the U.S. Fire Academy at Emmitsburg, MD. During 1983-84, the People's Firehouse and other CBO's and technical assistance organizations established contact with USFA to once again attempt to develop resources to support local efforts. During this period of time, a series of Congressional and USFA meetings were held to discuss various community based programs including the

National Community Volunteer Fire Prevention Program, the Anti-Arson Discretionary Program, and the residential sprinkler program. As a result of these meetings with USFA officials, $300,000.00 was allocated to fund 15 community based arson prevention programs. These funds were significant and for the first time the USFA acknowledged the need to develop community based programs and alternatives to reactive programs.

The People's Firehouse Inc. received $50,000.00 the largest national grant. Subsequently, the CBO's were invited to testify at the Sub-Committee for HUD and Independent Agencies budget hearings in the spring of 1984. The testimony of the CBO's stressed a number of important areas and support for the USFA. These included the continued funding of the National Community Volunteer Fire Prevention Program with an additional $1,000,000.00 for FY 85, $1,000,000.00 to be used to develop public/private sector partnerships, and 2 1/2 million dollars for the residential sprinkler system program. Of this 2.5 million dollars the joint managers statement of Congress specified that at least 1 million dollars should go to the retrofitting of buildings in older urban neighborhoods. Lastly, it should be pointed out that the Anti-Arson Discretionary Program which funded the 15 organizations was funded partially out of USFA discretionary funds and partially out of funds from FEMA's Civil Defense Budget. These funds were not taken from fire programs or diverted from the fire services to the CBO's.

Currently, the relationship of the CBO's and the U.S.F.A. is in an inactive mode. The USFA, from a community perspective sees itself and its mandate from the Fire Prevention and Control Act of 1974 as primarily reactive and the fire services as its main constituency. A prevailing attitude of many of those who work or consult for the USFA or receive contracts from USFA is that USFA's primary responsibility should be to serve the fire services and its interests. Additionally, USFA's methods of developing programs, identifying neighborhood resources, and looking beyond reactive approaches to stopping fire seems short sighted. As an example, during the development of the National Community Volunteer Fire Prevention Program, while the community based anti-arson programs supported the initial funding of the program and subsequent increase of funding, the network of CBO's were not included in the actual development of the program and their involvement in its implementation was minimal. Just as firefighters have expertise in suppressing fires, CBO's have expertise in developing, implementing, and raising funds for community based and volunteer programs. A meeting was held at the U.S. Fire Academy with approximately 10 CBO's. Recommendations were made to USFA on how to implement this type of program. Few recommendations made by the CBO's were implemented in spite of the fact that the USFA did not have a previous track record either administering or running a community based project. To further illustrate the lack of CBO input, a national team was established by USFA to oversee the National Community Volunteer Fire Prevention Program (NCVFPP). This team included USFA staff, a representative of the National Governors Association, and ISFSI. Community representation was rejected

and the CBO's were eliminated from the planning, development, and implementation process. This failure to include the participation of the CBO's in the planning and development process is consistant with the USFA's denial of CBO participation in most of its programs. Other examples include no CBO representation on the USFA National Conference Planning Committee and a general exclusion of CBO's from taking advantage of training programs offered at the U.S. Fire Academy.

Lastly, the USFA has pursued a policy of "benign neglect" in dealing with community based organizations. This additudinal and insulated perception of its role and responsibilities is the result of a loose interpretation of the Fire Control Act of 1974. This loose interpretation, coupled with the fact that today it is outdated, has allowed the USFA to virtually eliminate one of the most important sectors from the overall fire /arson prevention partnership; this being the community. If the fire problem in the USA is ever to be controlled it must begin in the community, neighborhood, or town at the most basic level, the home. The USFA's committment to reactive strategies, research, development, and technology is certainly important. However, historically, it has not adequately related to community based fire prevention programs in spite of their cost effectiveness and success. The USFA has not developed an adequate committment to community based programs. Inherent in its perceived mission under the Fire Control Act of 1974 is a mandate to serve the fire services as its main constituency at the exclusion of the other participants in the fire/arson prevention partnership. Over time this perceived mission has become "reality", and there exists a skepticism and deep seated resentment about the importance and effectiveness of community based arson and fire prevention programs.

OBSERVATIONS AND CRITICISMS OF THE USFA

I believe that a standard should be used to judge USFA's effectiveness in promoting its goal of reducing fire. This standard should include its ability to pull together, work with, involve, consult, and support all sectors of the fire/arson prevention partnership. I feel that to date the USFA has fallen short of this standard and I believe that it is a major shortcoming of the USFA.

In relation to "America Burning", I believe that its intent, to make USFA a central focus for coordinating and addressing the national fire problem was positive. There is a need to focus on the "total picture" and to "advise the budget makers on what programs deserve support". However, because the Act is so general and because it leaves alot to interpretation, it has allowed special interests to exert pressure on which sectors should receive these funds. I believe that USFA has not looked at the "total picture" and has defined for itself who could or should be involved in fire prevention programs. Therefore I believe that any new Fire Prevention and Control Act should include the input of all sectors and specifically define who these sectors are. This should include the CBO's.

Another example of the failure of USFA to focus on the "total picture" is the inability of USFA to pull together a strong, unified, and coordinated Federal Arson Task Force. To adequately coordinate national research, development and resource issues the involvement of agencies such as HUD, ACTION, HEW, FBI, etc. are critical. While some interaction may presently occur, I believe that USFA has not done enough to coordinate the total picture. Additionally, USFA's isolation of the community sector has eliminated one of its most important resources for research collection, development, and demonstration project implementation to test new and existing technologies. Its inability to articulate clear, concise, consistent and cost effective goals has not been an asset in approaching the Congressional budget makers who represent the constituencies living in these communities.

At the local level, arson and fire prevention, while certainly important issues, have not received the level of support necessary to eliminate the fire problem. It has only been in recent years that local government has committed resources to prevention efforts. One reason for this is the fact that prevention programs do not substantially increase fire department budgets the way that reactive or suppression programs do. In addition, fire prevention programs usually require long term planning, long range committments of resources, and often do not show results immediately but rather over time. Because of these realities, it is important to have a federal focus that can initiate and respond to innovative and cost effective research and development projects and to develop models for local implementation. The transfer of these models and technology is probably one of the most important reasons for USFA's existence. However, its present methods of resource allocation, lack of competitive bidding for contracts, nonexistent grant policy, and methods of soliciting input into

programs explains why the process does not work for some sectors and does for others. These include the fire service and research communities. Many of the USFA programs reflect reactive perceptions of the fire problem and do not encourage outside input, feedback, or criticism. To insure its effectiveness, the USFA should continue to support reactive programs at the local and state levels because these are important at all levels. Further, USFA should make a committment to develop local initiatives, develop community based programs, and reaffirm its committment to developing public/private sector partnerships. These should be well defined and included in the new Fire Prevention and Control Act.

A major shortcoming of the USFA is its inability to transfer new technologies to the local level.. This can be attributed to the fact that historically, the USFA has been "worried" that it will receive negative criticism from the "national" and "international" fire service and research communities if resources are given to community based programs. Another reason has to do with "attitudinal perspectives" that "civilians" do not understand the fire problem and that they cannot understand existing technology because it is too complex. A good example of an exception to this is the AIMS program which was developed by a community group, further developed and advanced by the USFA, and transferred to the local, state, and city levels in both government and community based programs. A good example of the failure of USFA to transfer its technology is its unwillingness to allow community participation in the planning and implementation of the USFA National Conference on "Partnerships". While the theme of the conference was developing partnerships, community participation in developing meaningful workshops was virtually eliminated. In spite of the positive and extensive track records of the CBO's such as the People's Firehouse, CBO's have been eliminated from a process that could benefit other CBO's, the firefighting and research communities. Instead of using the community as a place to test technologies, the USFA is discouraging community participation through inactiveness, lack of communication, and misinformation.

One recommendation for increasing its effectiveness at transferring new technologies to the local level and better coordinating its overall effectiveness would be to develop a number of program area advisory committees comprised of representatives of each of the sectors. These committees would make recommendations, identify cost effective, unique, and innovative projects and develop a body of information and perspectives on resolving the fire problem in the US. This committee should be chosen jointly by Congress and the USFA. Additionally, the new Fire Prevention and Control Act should mandate that USFA be represented by all sectors on its staff, that all national conferences reflect the involvement of all sectors in their planning and implementation, and that USFA staff be encouraged to visit communities and better understand local fire problems. Additionally the location of the USFA in Emmitsburg, MD has isolated it from contact with communities, local government, individuals, and other federal, state, and city agencies. It is time

consuming and inconvienent to travel to Emmitsburg and Congressional staff do not have access to USFA staff. The USFA should be moved back to Washington, DC where it can be monitored more closely, and where the public and private sectors can have more access to its vast depository of resources. Lastly, the U.S. Fire Academy should be mandated through the Fire Prevention and Control Act to open its doors to training civilians in fire prevention techniques and should encourage the development of public/private sector partnerships. This should include bringing civilian experts to the academy to teach members of the fire services as well as fire service experts teaching civilians. This will have the effect of deinstitutionalizing the fire issue and will give each of the sectors the opportunity to learn from each other. This is particularly important when one views the interrelationship between fire/arson and housing policy, development, economic, social, political, structural and behavioral issues. In short, in addition to the technological issues of fighting fires, the fire service community could acquire valuable information from experts in the housing, development, behavioral, economic, and social disciplinary fields of study. Likewise, civilians involved in arson/fire prevention activities could acquire valuable perspectives on fire fighting and fire fighting technology.

I believe that the USFA as it presently exists is involved in a number of important and useful research and development projects. I also believe that there are gaps and areas which USFA should be addressing. These include the development of community based initiatives to address local fire problems, arson-for-profit, insurance sector accountability, and legislative models for local implementation. Emphasis should be placed on assessing local city, state, and federal housing policy and its impact on preventing fire. The question of fire department support is always raised in the context of assessing community based fire programs. This is always used as a criteria for USFA funding. The reverse should also be true and the same question should be asked of the fire services. Do you have community support for your efforts? Are you doing everything that you can do to involve community organizations in the prevention process?

The battle between prevention and suppression is fought most vehemently within the fire services. From a budgetary standpoint fiscal crisis' which cause budget reductions ultimately impact on prevention efforts before cuts in suppression are made. One good example of this can be seen with the New York City Fire Department during the 1975 fiscal crisis and prior to the elimination of fire companies. The Fire Prevention office was reduced to a one person operation for all of New York City.

The USFA is heavily influenced by the national and international fire protection and research establishment which is dominated by the fire services. As a result, fire service representatives are privy to budget meetings, access to decision makers, input into the development and implementation of projects and programs, and have influence by nature of their proximity to the decision makers to changing program directions and

priorities. They are truly insiders to an otherwise closed process. The USFA is dominated by staff from the fire services who have limited experience managing non-profit, community based programs. Because of this deficiency programs funded by USFA, like the Anti-Arson Program, which have the potential for yielding innovative models are treated as "formalities" that must be managed because of Congressional mandate. A vast resource for new ideas and methods is being ignored and wasted. The view that community organizations can be vast depositories for research and resources is non-existent.

The USFA is not oppossed to fire prevention activities and supports many worthwhile projects. The issue of suppression vs prevention will never be resolved so long as fires occur. It is a classic contradiction since prevention efforts, if successful, would ultimately curtail suppression activities and reduce fire department budgets and as a consequence, manpower. By eliminating input from the community sector and its ability to train, educate, and implement programs at the local level, the USFA is not fulfilling its role of "looking at the total picture" of fire research and development needs. Instead the community sector is viewed as interlopers, and intruders, outside of the mainstream of traditional fire fighting thought. This perception should be corrected in the new Fire Prevention and Control Act. The new Act should be specific to define a mandate that all sectors participate in the national fire program. This should include CBO's, community development organizations, volunteer, service, and civic groups.

CONCLUSION

The USFA is critical if we are to have a focused national policy to prevent fire. The development of this policy should include a strong national Arson Strike Force which includes input from various, appropriate federal agencies. Its purpose should be to develop programs, coordinate federal resources, and encourage research and development vis a vis fire. At a policy level, the USFA should be mandated to establish working committees comprised of representatives of the various sectors to assist in program and resource development. At a staff level careful consideration should be given to identifying staff with administrative, program, management, and fund raising backgrounds from each of the sectors to implement, monitor and evaluate research and development activities. A balance must be reached between suppression and prevention issues.

In closing, no one sector should control a national fire program dedicated to the prevention and control of fires in our communities. The perception that only "professionals" understand the fire problem is a myth that has been perpetuated for too long. This type of perception must be eliminated to insure a truly integrated and effective approach to preventing and suppressing fire. This integration or "partnership" can be formed by a reorganization of the USFA and its authorizing legislation. The Fire Prevention and Control Act of 1974 is over ten years old. During this period of time many innovative and life-saving programs have been developed by NFPCA and USFA. During this same period of time, we are no closer to eliminating the fire problem in the United States. Communities continue to burn as they are ravaged by fire and deterioration. We have seen unprecedented destruction in urban and rural communities as the result of arson. We have seen viable housing lost to fire and deterioration, and as our housing gets older and our infrastructure ages, we can see an overall increase in preventable fires. It is now time to reflect over the last ten years and redefine the mission, goals, objectives, and operations of the USFA. Technology is at the cutting edge of making great strides in preventing fires in the home. Community Based Organizations such as the People's Firehouse can play an important role in reaching this goal.

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Mr. WALGREN. Thank you very much, Mr. Ringler. We appreciate that testimony and we'll turn to Mr. Garneau then.

STATEMENT OF ERNEST GARNEAU, EXECUTIVE DIRECTOR, URBAN EDUCATIONAL SYSTEMS, BOSTON, MA

Mr. GARNEAU. Thank you, Mr. Chairman. My name is Ernest Garneau and I'm the executive director of Urban Educational Systems in Boston, which is a nonprofit organization first established in 1977. We're an organization that has dealt, primarily, with arson and fire prevention with community organizations. And in that sense it has, over the years, has given us a slightly different perspective on how to approach fire and arson prevention. In that perspective, as it has developed over the years, has come out of a series of experiences and approaches that community organizations adopted over the years because primarily a lot of these organizations were housing organizations. When we had the opportunity to be asked to—what would we do around the Fire Administration to incorporate this and to look at the authorizing act, quite frankly I was—I was sort of taken back by the act because the two people to my left, who have had substantial success in reducing the fire, through fire prevention methods, are not even officially recognized in the act in such things as fire prevention, those activities undertaken by the Fire Service. So, in some sense that the activities of these organizations are not even recognized by the act. But beyond that I think that it is a larger reflection. We have been working with the Fire Administration for since our existence, in fact our first grant was given to us by the U.S. Fire Administration to develop the first computerized arson early warning system. So, our relationship has been long. I don't necessarily feel it's been smooth. And we could get involved in particular instances of the problems with the Fire Administration, but it's not a problem with the personnel there or the personnel now. It's really, in reviewing the act, a problem with the structure and the way fire, in some sense is viewed in this country.

Over the years, in our training of community organizations, we have taught them to look at fire from a management perspective and to break it down into different areas. In reviewing the act and our suggestions and comments on the budgets, we feel that it's real important that we deal with the structure first, what are we doing now and what can we do in the next 10 years and in some sense the original act, which was really a breakthrough in the area of fire prevention, has made this possible. That's not to say in the last 10 years we've done things wrong, that in order to get to this point in time we needed what we had, but in order to get even further we need some changes and I would like to just go over these charts briefly and sort of conclude with why we make our recommendations.

We first of all took the fire problem and we broke it down into two separate areas of fire, accidental fires and arson fires and this first chart is a—the cause is the cause of accidental fires: people causes, careless disposal of smoking material, playing with matches, just structurally generated fires. These are fires that are generates for—by electrical wiring, misuse of heating equipment,

and the third area, which is something that we can really do very little about is acts of God, but as you will notice that the acts of God are very limited in fires.

The second chart that we have is arson fires. Now arson fires are either profit motivated or they're nonprofit motivated and we have some, just for example, insurance fraud versus juvenile fire setting. Now, the reason we break the fire problem down to these two areas is that the approach to juvenile arson versus insurance fraud is very important to note, because if we're talking about turning a reward programs in with the posters on the street it's not going to be very effective against insurance fraud.

Next chart. So what we have here is a structure that says the fire problem can be broken down in a slightly different way that on one side we have structurally generated fire problems and another one then is people behavior problems. For example, several years ago Congressman Moakley had asked me to look into why historic buildings were burning, and we looked at the Tax Act Law that govern them and on one side there were all these benefits that would accrue to the owner of the building if they rehabed it and all these penalties such as you would not get accelerated depreciation, you could not write it off in 5 years, you could not use 200 percent accelerated depreciation if you tore this building down and then there were the last few words, and I'd really like to underline what we mean by structural prevention, the last few lines in that Act were, after all these penalties would be—would happen to you if you tore the building down it said, "except in the case of fire." We did a study—I mean it was a guideline on how to get around the tax law, and as a result of that we did a study and we started looking at newspaper clippings and 75 percent of the historic buildings that we identified through newspaper clippings were under development, about to be sold or in the development process. Obviously the person that wrote that piece of legislation did not do it maliciously, but that one person that wrote that one piece of legislation caused more history to burn that probably the burning of Washington in the War of 1812. That's what we mean by a structual approach to arson and fire prevention.

The next chart. Thank you. The last chart that we have here has some principal methods of dealing with our fire problem and under each box we could have, you know, broken that out into structural as well as to people generated. The risk management, loss reduction, fire suppression and post-fire follow-through. As was noted in earlier testimony and in "America Burning" we devote very little of our efforts to fire prevention. And that has been the patent and the trend at the U.S. Fire Administration. Although some things have changed and there is a re-emphasis and we have some volunteer programs, however, I would like to stress that the type of prevention that we have in this country is designed for children. Third grade level. That there is no structural fire and arson prevention activities occurring, that these are the activities that have shown the most success. A 47-percent reduction in Providence did not just happen. Fritz Ringler's firehouse in New York, his neighborhood sets next to a neighborhood that has burnt down, that these programs are effective, they have used a structural approach, that within the structure of the authorizing act these activities are not

encouraged, they're not even recognized or identified. It is as important for people that are designing housing policy and programs to be aware of the fire impact of their programs. City after city we have gone into, Chicago, St. Louis, San Francisco, Boston, we have seen wherever there was a highway that was planned, there was the fire corridor. Wherever there was FHA housing with policies around foreclosure that would have these buildings become vacant, that's where the fire corridor was. We could walk into a city—I could walk into any city and say, "These are the programs that existed." These programs were generated by State and Federal Government with no consideration about what the fire impact was.

Unfortunately as we have dealt with the Fire Administration and other agencies it's trying to convince HUD that they should be concerned about fire. It's trying to convince the Justice Department that they should be concerned about fire. It's always the other person's job and so the recommendation of a strong task force, a task force with resources is really very recommended, but the creation of partnerships in this effort have to include people like Fritz and Marty and other organizations out there. They have to include the person that wrote that tax law for historic preservation. Those are the type of efforts we would like to see and the type of structure that we would like to see at the U.S. Fire Administration. Those are the type of efforts that have produced substantial results, so, therefore, we have developed a whole series of recommendations that would encourage that type of approach, not to the exclusion of fire suppression because our firefighters should be trained to fight fire as safely as possible. We should have good arson investigation teams. These are things that we have supported in the appropriation hearings. These are things that we have supported on our local level. But, the real need in looking at the Fire Administration structure has been a whole lack of a structual approach to arson and to fire prevention. We have spent a lot of time designing cartoon characters when we should be spending some time training people that are developing housing programs.

I'd like to thank this committee for the time and the effort. Thank you.

[The prepared statement of M. Garneau follows:]

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Testimony of

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Before the
House of Representatives
Subcommittee on Science and Technology

March 25, 1985

I would like to thank the subcommittee for the opportunity to present testimony on the future of the United States Fire Administration, the National Fire Academy and the Center for Fire Research. I have chosen the word "future" deliberately because it is to the future that we must look in order to prevent one of the most serious public safety issue that faces this country: fire. This issue affects every city and town in this country on a daily basis.

The problem of fire in this country has been well-documented. While we should look to our future for new direction we should also look to our past for lessons to be learned. We should do this to insure that the policy for fire prevention for the next ten years provides us with true navigational points from which we can chart our course towards a fire-safe America, an America first envisioned in "America Burning" over ten years ago.

During the past ten years, we have experienced four separate administrations, numerous administrators, reorganizations, and changes in emphasis at USFA. It is important to note that the present effort at USFA is only the most recent in a ten-year period. The only consistent factor over this period of time has been the Authorizing Act which established those efforts and provided a structure within which those efforts were to be undertaken. The structure provided by the original act ten years ago has been the consistent ingredient in establishing a base for a fire-safe America. Without this act, little progress would have been made towards our goal of a fire-safe America. Because of those efforts, there is now a need for changes in the Act. The changes needed would provide a structure over the next ten years that will advance us even further towards a fire-safe America. Without these changes, we suggest that progress towards a fire-safe America will be threatened.

Given the original Commission's report that strongly stressed the need for fire prevention, why hasn't this occurred ten years later? Why are changes need now? How can the Authorizing Act be changed to increase prevention activities?

In 1974, the United States Congress undertook the first major effort to deal with the fire problem from a federal perspective by enacting public law 90-259 known as the Federal Fire Prevention and Control Act. This legislation developed out of The National Commission on Fire Prevention and Control. This act recognized for the first time that there was a need for a federal role in the area of fire prevention and control: to supplement local efforts and to provide focus and coordination of efforts that went beyond the capabilities of local and state government. A great deal of caution was expended in noting that the fire problem was a "local problem" and that the federal effort was not meant to supplant local efforts. We think it is important to note that for may years law enforcement has been accustomed to a federal role. While both types of organizations serve primarily

local functions, the fire service - other than through various voluntary organizations - has only minimal involvement with the federal government. Therefore, the Act of 1974 was indeed monumental in that it occurred. Unfortunately, the promise of the Act to increase fire prevention efforts and to reduce the fire problem is still unrealized.

As the following table demonstrates, the fire problem in the United States, when compared to other industrialized nations is - to say the least - the worst:

	Fire Deaths/100,000 Population	Fires/1000 Population
France	0.56	1.68
Denmark	0.98	3.72
Australia	1.15	5.40
United Kingdom	1.52	5.85
Germany	1.63	1.86
Sweden	1.70	N/A
United States	3.80	12.89

Source: NFPA, 1982 based on 1978 data

What is particularly distressing about these numbers is that, while we have the highest fire injuries and fatalities per capita, the United States has more firefighters per capita and better response times than most of the nations on this chart.

This data shows clearly that our problem is not in getting to the fire; our problem is that we have too many fires. A similar conclusion was reached by a National Science Foundation advisory panel. They concluded that a reduction of the nation's fire problem could best be achieved by prevention, early detection and sprinkler systems.[1/]

The ability to increase fire prevention efforts will continue to be limited unless changes are made in the original act to stress the importance of fire prevention. These changes should provide a vehicle from which fire prevention can be expanded to incorporate and encourage other organizations other than the fire services, which are suppression orientated, to become active in fire prevention. Without such efforts, our fire problem will continue to remain the worst of all the industrialized nations.

1/ Swersey, Arthur J. and Ingall, Edward, "What does Fire Research Have to do with Fire Protection?" Fire Journal, January, 1980, 63-74.

This is not to say that we should not expand the training for our fire services in a manner that enables them to suppress fires more quickly and with less injury and property loss. The changes that we recommend are based on the need for true prevention efforts so there are fewer fires to suppress.

First:

The original authorizing act, while a major breakthrough, did not emphasize prevention. Indeed, even if it had, such activities would have been limited to the fire services which, as noted in the original act, only devote 5% of their budgets to fire prevention.

Second:

That fire departments today, ten years later, still view fire prevention as secondary and will continue to do so ten years from today.

In addition, the type of fire prevention activities commonly undertaken today are, for all practical purposes, limited to behavioral modification type of efforts. Structural fire prevention activities - which could produce substantial reductions in the number of fires - are totally ignored.

Unfortunately, if structural fire prevention efforts are not undertaken,we not only lose the opportunity to reduce fires, we also stand a real chance of increasing the amount of fires.

If the Committee had asked ten years ago who is involved in fire prevention, the answer would have been the fire service. Today, however, many more types of organizations have become involved. These organizations, unlike the fire service, are concerned about fire prevention as a primary activity, while the fire service sees fire prevention as secondary to suppression.

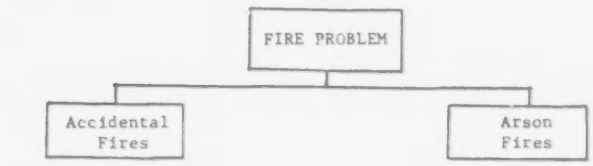
While these sectors have become involved with fire prevention during the last ten years, they have done so in most cases without the support of the fire services, USFA, or fire service organizations. In many cases, their efforts received hostile attention from the fire services and were often seen as intruders into the domain of firefighters.

"What do you know about fighting fires" was and still is a question that is often asked of these perceived interlopers. However, the people who are becoming involved in prevention are not particularly knowledgeable about "fighting fires"; they are concerned with preventing fires. They have brought to this effort considerable skills in housing, planning, development, research, education and community organizing.

This hostility is counter-productive to the efforts of both the fire service organizations and the other types of organizations that are involved in fire prevention.

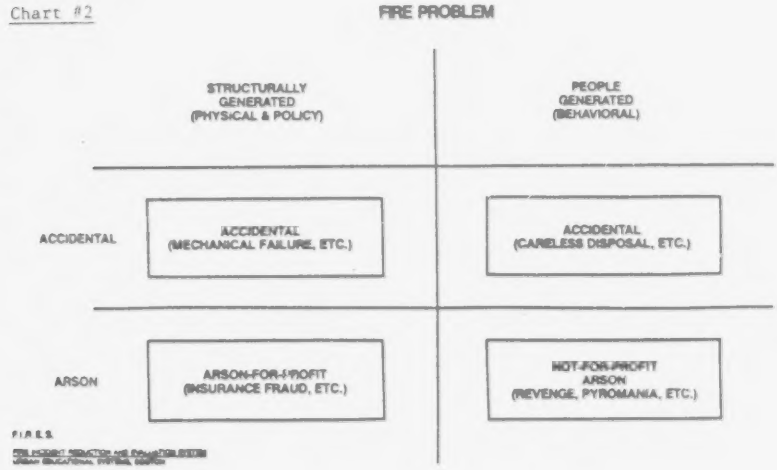
Before we present recommendations that could facilitate eventual cooperation between the two sectors, a structure in which these recommendations can take place is necessary. Chart #1 describes the entire spectrum of fires. Fires are either set (arson) or they are accidental.

Chart #1



The second chart further develops what the fire problem is in a slightly more detailed manner. It subdivides the two main categories into (1) those fires that are structurally generated (that is, those fires that are caused by mechanical failure or policy decisions) and (2) those fires that are caused by people or the behavior of people. In some cases, there is a crossover when the cause of a fire could be from both.

Chart #2

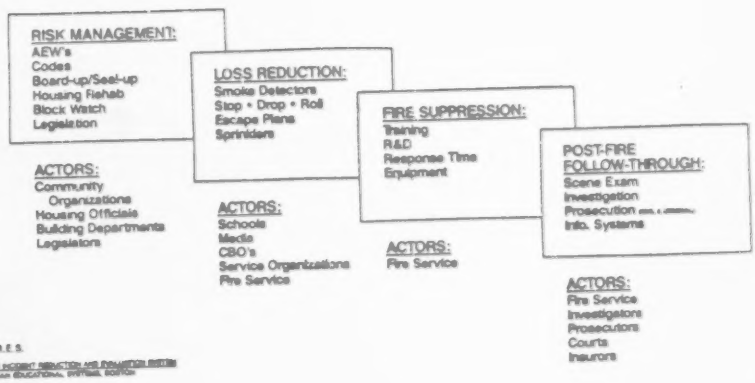


Structural fire prevention activities, for both accidental as well as arson, have been severly limited in scope for two reasons: (1) the skills required for such efforts are not contained within the fire service; and (2) organizations that have those skills are not involved in fire prevention or, in some cases, have received such hostile reception or non-acceptance that do not remain for long.

Chart #3 describes the four principle methods of how we deal with the fire problem. As the chart shows, the four areas are interrelated. A thorough arson investigation will produce benefits in the area of risk management while an arson early warning system can substantially aid post-fire followthrough investigative efforts. This chart also shows how and where various actors can participate in efforts to deal with the fire problem in the United States. The chart also gives some examples of what types of programs can occur in each area.

Chart #3

PRINCIPLE METHODS OF DEALING WITH THE FIRE PROBLEM



Given this structure, does the Authorizing Act facilitate USFA involvement in these areas? To what degree is USFA currently involved in all of these areas? Do their currently authorized activities involve the broadest-based participation of the various actors included in the chart? Finally, if one of the original intents of the Congress was to increase fire prevention activities - which has been consistently cited as the way to reduce our fire problem - is that occurring?

Our conclusion is that USFA and the Fire Academy, given its present mandate, will continue to reflect a suppression bias. Unless the Authorizing Act is changed, this suppression bias will limit the amount of prevention activities and - in particular, structural prevention activities - undertaken in the future. The limiting of these activities will severely hinder efforts at reducing the number of fires in this country.

RECOMMENDATIONS:

Problem Statement #1:

The purpose section of the original act sets no goal by which progress can be measured. Wihtout a measurable goal, annual review of efforts undertaken cannot be measured.

Recommendation #1:

Establish a goal of 1%-5% reduction per year in the purpose section of the act and require a statement of performance in the appropriate sections of the act for an annual report to the Congress describing the activities undertaken to achieve this goal and the results of that effort.

Rationale #1:

Without a direct performance standard, success or lack thercof is difficult to measure. A 1%-5% reduction standard will move USFA towards prevention in order to achieve this goal.

Results #1:

With a specific fire reduction performance standard, USFA can be evaluated on their efforts to accomplish this goal. While improving the capabilities of fire suppression efforts will still remain an objective of USFA, this recommendation will stress that the overall goal of the agency is to reduce fire incidence.

Problem Statement #2:

At the present time, the purpose section of the act contains no statement encouraging organizations outside of local and state governments to participate in fire prevention efforts. Without such a statement, fire prevention efforts in USFA will receive little emphasis.

Recommendation #2:

That the following language be added under the purpose section of the act, Sec. 3.(5): "That it is the purpose of this act to encourage and foster throughout all of the subsequent sections of this act the participation of organizations outside of the fire service in fire prevention activities."

Rationale #2:

If we are to broaden the base of fire prevention efforts that goal should be so stated in the purpose section of the act. That purpose should alse be reflected throughout the act.

Results #2:

This statement will encourage the participation of organizations outside of the fire service to participate in fire prevention activities. It will also be the first time that the Congress has officially recognized and encouraged that participation as part of the effort to reduce fires.

Problem Statement #3:

The definition section of the act is extremely limited and restrictive. This limited definition section does not even recognize that non-fire service sectors exist and that they could have a positive impact on the fire problem. The definitions section can also be used to further underline the concept of prevention and the involvement of other sectors.

Recommendation #3:

That the following definitions be expanded and added:

That the last sentence in Sec. 4.(4) be changed to read: "The terms 'firefighting' and 'fire control' relate to those activities conducted by the fire service. The term 'fire prevention' be defined as those activities undertaken by the fire service and other organizations as defined in the section."

That Sec. 4.(5) be amended and expanded to include:

"or non-profit organization that provides services within those political jurisdictions."

That Section 4 be expanded to include:

(8) "'Fire prevention' is defined as those activities undertaken to reduce the occurrence of fire."

(9) "'Loss reduction' is defined as those activities undertaken, in the event of a fire, to reduce the loss of life and property."

(10) "'Arson Prevention' shall be defined as those activities undertaken to reduce the occurrence of arson fires. Such activities shall be deemed separate from arson investigation activities defined elsewhere in this section."

(11) "' Arson Investigation' shall be defined as the activities undertaken to further the capacity of the fire service or the appropriate law enforcement agency to undertake a successful prosecution of arson.

Rationale #3:

These changes and additional definitions reflect the need to include other organizations as an integral part of fire and arson prevention efforts. It also sets a contextual tone for other aspects

of the act as presently stated and recommended changes in a manner that would be consistent with broadening the activities of fire prevention and the organizations involved in those activities.

Results #3:

Including these new definitions as well as expanding the existing ones will broaden the scope of the organizations that can be incorporated into arson and fire prevention. These recommendations, while definitional in nature, set the basis for future cooperative efforts between the various sectors by first officially recognizing that these other organizations exist and what is meant by prevention.

Problem Statement #4:

Section 6, Public Education, is extremely passive in its approach. As stated, there is no active involvement of other organizations in public education around fire prevention. This reflects the fact that educational efforts of the fire service have been biased towards loss reduction and fire suppression and to a lesser degree post-fire followthrough. Educational programs should be developed for other sectors, such as housing and community organizations, for example. Without these types of educational programs for people involved in developing housing policy, programs could be designed that could encourage fires.

Recommendation #4:

Insert before the last sentence in Section 6 the following language:

"The Administrator is authorized to develop educational programs for other public and private sector organizations in the area of arson and fire prevention. These educational programs shall be designed to increase the awareness and involvement of housing organizations, community organizations, service organizations, and state, local and regional planning agencies as to their role and involvement in arson and fire prevention."

Rationale #4:

Active recruitment by USFA using educational methods is an essential component in increasing arson and fire prevention efforts. If these other organizations do not know that they are part of the problem, they will never be part of the solution.

Results #4:

The active recruitment of the aforementioned organizations will increase the awareness and participation of these organizations in fire and arson prevention activities. As a result of this increased awareness, policy and programs in their respective areas should reflect a concern for fire potential or fire prevention opportunity.

Problem Statement #5:

Sec. 7(d) Program of the Academy. Just as other sectors have to become aware of their role in preventing fires,the fire service has to become aware of the potential role of other sectors in fire prevention. This lack of awareness on the part of both the fire service and the other organizations as to the role each other plays in preventing fires is a rudimentary hinderance to increasing fire prevention efforts and cooperation between the two sectors. Only when this issue is addressed will truly cooperative efforts begin.

Recommendation #5:

That the following language be added or deleted, where appropriate: That after Sec. 7.(d)(1)(A), to be known as (1)(B), the following language be created: "A course of study shall be offered to present and future fire chiefs and commanders as to the role that other sectors can play in fire and arson prevention. Such course of study shall include the role of housing and planning agencies, community organizations, service organizations and others." (subsequent section will change accordingly: B becomes C, etc.)

Appropriate language should be added authorizing scholarships to encourage participation in this course of study (approx. 500).

Under Sec. 7(d) a new subsection (2) with the present subsection (2) becoming subsection (3) and etc., add the following language: "Shall establish a course of study for non-fire service personnel on arson prevention in the following areas:

(A) Policy-making as it relates to fire prevention in the fields of housing, planning, tax policy, community organizing, insurance, victim assistance, and other appropriate areas."

Appropriate language should be added authorizing 500 scholarships with a minimum of 200 set aside for non-governmental agencies.

Rationale #5:

As the problem statement states, there is a need for these types of efforts to educate the various actors as to the potential role each can have in preventing fires. The education of these sectors to this fact will heighten the awareness of this need and establish the authority for the appropriation of funds to accomplish this objective.

Results #5:

The changes recommended will creare the basis for future cooperation and a better understanding between the traditional fire service sector and people or sectors that should be involved in fire prevention. This integration of efforts will further the involvement of both the fire service sector as well as other organizations that should be involved in fire prevention.

Problem Statement #6:

Section 8(a), Technology Development Program. As presently stated, the emphasis on developing improved technology for fire-fighting apparatus and to insure that this technology is adopted by the fire service. This should remain a key effort of the Fire Administration. However, where this section and its relationship to other sections falls short is in the development of fire prevention and alarm systems and - most importantly - the adoption of these systems by the public. As noted earlier, under Sec. 7(d)(5), USFA is charged with encouraging the adoption of fire prevention technology by builders, planners, architects, etc. But how is this to be done? We think this is of special importance, given the isolation of the fire service from these fields. Unless efforts to increase the distribution of these types of systems is specifically mandated, such systems will remain greatly unused by the public.

Recommendation #6:

We recommend that under Section 7 or Section 8. language be added along with authorization for funding that states USFA is charged with identifying the problems that exist in deploying fire safety systems in existing as well as new construction and propose model methods of overcoming these hinderances. Further, that programs be established for direct efforts on the part of USFA to more directly involve the building industry in the adoption of the available technology.

Rationale #6:

In 1974, after the first oil embargo, the U.S. undertook a national effort to reduce energy consumption. Since that time, state and local governments have offered a variety of incentives such as tax credits and revolving loan funds, etc. to reduce energy consumption. Because of those efforts, new technology was developed that advanced the cause of energy conservation. Today, builders of new homes - as well as others involved in weatherization of existing structures - have incorporated that once - new technology as standard operating procedure. There are striking parallels between weatherization and the potential to incorporate new technology in fire prevention.

Results #6:

This recommendation would institute an outreach effort by USFA to promote new technology and set the basis for long-term efforts in the adoption of such technology.

Problem Statement #7:

Section 8(c) Management Studies. The management of fires and how to assist that effort is adequately covered. What is not covered is any assistance to institute or develop the capacity of other organizations in their efforts at fire prevention. These organizations would include community organizations; national, state, regional and local planning and housing agencies, maunicipal managers and departments;

victim assistance organizations; and others.

Recommendation #7:

A section 5 be added under 8(c), with language that states: "The Administrator is authorized to develop and institute programs that will increase the capacity of non-fire service organizations on a national, state, regional, municipal and neighborhood level to develop and implement fire and arson prevention programs. These programs will be consistent with other aspects of this act and will be designed and implemented in such a manner as to increase the awareness and involvement of these organizations in fire and arson prevention efforts. The Administrator is authorized to make contracts or grants to all of the aforementioned organizations in order to accomplish the aforementioned goals.

Rationale #7:

The fire problem can only be successfully mitigated if other actors such as code departments, etc. are first aware that their actions can have positive or negative effects on the fire problem. This broadening of the base and participation in fire prevention will be essential in order to achieve the proposed reduction goal of 1% per year.

Results #7:

Outreach and assistance by USFA to sectors that are not now participating will increase the involvement of these organizations in fire prevention. The development of new management capacity by these organizations will spread beyond the organizations directly assisted and will be adopted by similar organizations as a part of their responsibilities.

Problem Statement #8:

Section 8.(d) Rural Assistance. There are many organizations in rural America that could assist in the development of fire prevention activities. Even more than urban organizations, they have been ignored by USFA. This is particularly tragic in that rural fire departments can't - given their mostly voluntary nature - provide fire prevention services. There are many rural organizations that should be encouraged to develop and implement fire prevention programs but have been denied access to the necessary resources.

Recommendation #8:

That the following language be added after the last sentence in Sec. 8(d): "Given the nature of the fire problem in rural America, the Administrator is authorized to develop and implement programs with rural housing organizations and others that stress the importance of fire prevention and fire prevention systems as a method to mitigate the fire problem in rural America."

Rationale #8:

Because rural America relies hevaily upon volunteer effort and because of the distances rural firefighters have to travel to reach a fire, rural response times tend to be long. Given this condition, prevention programs are of special importance in rural areas. However, because of the voluntary nature of the rural fire service there is often neither the personnel nor the resources to carry out this import areas of work. However, there are a variety of rural organizations that could develop regional approaches to fire prevention that would be effective both cost-wise as well as programmatically. These organizations have been almost totally ignored by USFA as potential actors in fire prevention.

Results #8:

By encouraging the involvement of these organizations, a level of fire prevention could be achieved in rural America which would not be obtainable otherwise.

Problem Statement #9:

One of the most common complaints of anyone undertaking research into the fire problem is the accessability of reliable and current fire data . While data might be available it is hard to find scattered among different sources. Without current reliable and readily accessable data, it is difficult to measure effectiveness of fire prevention and control efforts. There has been a great deal of progress in this area and, in fact, USFA can produce some excellent data and analysis of that data. This is accomplished, however, on an as-needed basis and is reactive vs. proactive in nature.

Recommendation #9:

It is recommended that an Annual Fire Report be issued as an authorized activity and that this report be distributed to the widest possible audience. That audience should include housing organizations on all levels as well as other organizations that have been mentioned previously in this memo. An excellent model to follow is the Uniform Crime Reports, which is used and disseminated widely. One item that should be included in this report, besides data, is the progress that has been achieved in meeting the 1% reduction goal, including activities undertaken. The appropriate level of funding for this activity should also be authorized.

Rationale #9:

Mobilizing increased efforts in fire prevention has to be based on information as to the seriousness of the problem. Much of this data exists but is limited to those that are presently in fire prevention. If we are to expand the number and types of actors involved in fire prevention activities, that information has to be given to them as to prompt their participation.

Results #9:

There are many potential results from this recommended action:

1) This fire report will act as both an outreach effort to sectors and organizations as well as make them aware that USFA exists. If these other organizations don't realize the damage that fire is causing and their relationship to it, they will not be moved to participate.

2) This proposed recommendation will further emphasize to USFA the need to broaden fire prevention activities.

Problem Statement #10:

Section 14. Annual Conference: An annual conference offers an opportunity to reach out to many non-fire service sectors and organizations. It also provided the opportunity to incorporate these organizations into fire prevention efforts while reducing the isolation of the fire services. While such conferences are "open to the public", we do not believe that this provides enough emphasis for the need to incorporate these other sectors in fire prevention efforts. As presently worded in Sec. 14, the annual conference is a gathering of the fire service. Our experience at these conferences confirms this. This exclusively results in an ingrown bias and limits the potential for expansion of fire prevention activities.

Recommendation #10:

Replace Section 14 with the following:

"The Administrator is authorized to organize, or to participate in organizing an annual conference on fire prevention and control. He may pay, in whole or in part, the cost of such conferences and the expenses of some or all of the participants. The conference shall be planned, organized, and conducted in such a manner as to encourage the active participation and involvement of all the sectors that are or should be involved in fire prevention and control and shall be consistent with other sections of this act."

Rationale #10:

Annual conferences represent an opportunity to expand and integrate fire prevention activities among the various sectors as well as reduce the isolation of the fire services. In the past, these other organizations have been excluded from conferences on a defactor basis, thus the opportunity has been missed. This integration of effort has to occur programmatically and many of the recommendations that we have made stress just that. The conference represents an annual event where people - and we underline people - can be exposed to individuals from other sectors and backgrounds that have a common goal: reducing fires. As we noted in this recommendation, people from all sectors should be involved in the planning of such conferences, otherwise the appeal for the other sectors to attend will be limited and the exchange of knowledge and expansion of fire prevention activities will suffer accordingly.

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Results #10:

Besides creating an increased understanding between the various sectors, this emphasis on planning and conducting a conference for all of the sectors will provide an opportunity for the participants of all of the sectors to be exposed on a personal basis to those ideas. The development of personal contacts has been shown to be perhaps the most important factor in developing working partnerships. This recommendation simply provides the opportunity for that to occur.

Problem Statement #11:

Section 15. Public Safety Awards: Recognition of efforts serve a very important function. First, recognition of individual achievement or valor, and secondly that these individual efforts should be emulated and used as examples for society to value and follow. As presently stated and defined, such awards are limited to public safety officials. This definition and restriction limit both the recognition of individual achievements as well as values that as a society we should emulate.

Recommendation #11:

That three President's awards be given to organizations or individuals for outstanding performance in fire prevention activities other than a public safety officer as defined by this section. Similar language be adopted for the "Secretary's" awards.

Rationale #11:

Recognition of individual or organizational achievement in the area of fire prevention implies that this is a desirable activity to emulate.

Results #11:

A further emphasis on fire prevention activities.

Problem Statement #12:

A recent study of 12 NYC shelters for the homeless showed that approximately 50% of the residents of these shelts were the victims of fire. It is with some irony that USFA is under FEMA, the agency that is charged with disaster relief but has no program to deal with the relief of victims of fire who numerically represent more people than the victims of any natural disaster that FEMA normally will service.

If there was ever a case for the hidden victim it is the victim of a fire. The majority of these victims, if the data is correct, are also the least able to cope with this disaster financially and, as the NYC study suggests, emotionally as well (See Appendix B). There are two types of victims: victims that are physically and emotionally injured by fire, and those victims that are displaced by fire. Programs should be developed to assist both types of victims. As the original act states, these programs should not displace local

efforts but rather support, improve and, where necessary, coordinate. Given the lack of any of the aforementioned model programs should be developed, tested and disseminated on fire victim assistance.

Recommendation #12:

The Administrator is authorized to develop and implement the programs in the following areas to assist the victims of fire:

1) Develop programs to assist in the coordination efforts of victim assistance organizations.

2) Develop and implement model victim assistance programs in each region of the country.

3) Develop a Report to the Congress on the present efforts in this area and where improvements can be made and the cost and benefits of such programs.

4) Develop a plan for state implementation of fire victim assistance through FEMA and the respective state agencies.

5) Develop a model program that could be implemented by state and local housing agencies and organizations to house victims of fire.

6) Investigate legal remedies for civil damages in arson cases and promote these remedies.

7) Analyze and report on state victim assistance laws and programs.

8) Coordinate with other federal agencies these program activities.

Rational #12:

As previously mentioned, fire victims represent the largest single population of disaster victims. While they are the largest and most frequent group, there is virtually no efforts at coordination or development of new approaches on how to better serve this population.

Results #12:

Improved capability in servicing the victims of fire. Additionally, through this increased awareness the need for fire prevention will become more apparent to the states and organizations that service this population.

Problem Statement #13:

Juvenile arson continues to be a major contributor to our national fire problem. "Juvenile arson accounts for 37% of all arrests for this crime and results in 25% of the total dollar loss caused by fire" according to a resport of the National Firehawk Foundation.

Recommendation #13:

That a special task force be authorized by Congress to develop an organizational plan for the implementation and further development of juvenile fire prevention programs, with special attention on how these types of programs can be institutionalized on a local level.

Rationale #13:

Juvenile firesetting has been neglected in the past, despite the excellent programs that have been developed with the assistance of USFA. Unfortunately, they exist in a vacuum. Without an effort to develop an organizational plan for widespread dissemination and use, they will remain highly successful pilot programs that will fall by the wayside.

Results #13:

A Congressionally mandated task force composed of key people from various fire prevention sectors and organizations will be able to establish a long range organizational plan directed toward wide-scale adoption and usage of proven juvenile firesetters programs. Such an effort will assist in the reduction of fires in this area.

Problem Statement #14:

There is a need to create a partnership effort in fire prevention in order to broaden the scope of activities and to involve more actors in prevention activities. Such activities would also include broadening the base of financial support for such activities in the form of private sector dollars and increasing public support for these activities on a national, state and local level.

While the previous recommendations all assist in facilitating a partnership in fire prevention, they will tend to be limited and at the discretion of the administration existing at the time and subject to the personal bias of a particular administrator. Prevention efforts, if they are to be successful, should not start and stop and change direction based on the biases of one administration or one administrator, no matter how well-founded they may be. If they are well-founded, then they should be accepted by all the partners involved in such an effort. Terms should not be dictated or controlled but rather should be arrived at in terms of what is in the best interest of the goals of such a partnership.

How such a partnership is initiated and what structure a partnership eventually takes is best undertaken by a party who does not have a direct organizational role to play in the partnership once it is formed. Any organization that attempts to initiate such an effort and has a direct interest in the partnership (such as USFA or others) will be viewed skeptically, despite good intentions. It is of critical importance that such a partnership effort, if it is to be created, does not start out with mistrust of the initiating actor.

Recommendation #14:

Given the in-depth nature of creating such a partnership in fire

prevention that will assist in reducing the fire problem of the United States, it is recommended that this committee hold a series of hearings on this matter and investigate potential structures that such a partnership can take. As a result of those hearings, this committee should formulate the structure that such a partnership will take and institutionalize that methodology by incorporating it into the act.

Rationale #14:

Without an interested but neutral body undertaking present efforts at developing a partnership, suspicion and distrust will be created, instead of a concensus. This will result in an institutionalization of biases that may not be in the best interest of reducing fires through prevention.

Results #14:

If the subcommittee undertakes such an effort, it will provide the interested but neitral party that can initiate a true partnership of effort in fire prevention. Without this effort, prevention will be lost in the mish-mash that has occurred in the past.

Mr. WALGREN. Well, we certainly appreciate your having come and outlined that aspect of the problem, and it's a little difficult to know how the committee can respond directly to the—to fundamental change, but ought to be thinking about it. And I appreciate your having outlined it that way and we would—we would certainly try to understand it. And there may be ways that we can incorporate some of this—these directions in the system. Certainly the evidence is that we have to be doing much more on a community level and you're coming right from that contact point, and you would think that we would be able to have programs that incorporated that strength and built on that strength. The Federal program, of course, is pretty thin as it is in many ways and that makes it—makes it difficult, but I think the best thing I can suggest, from my standpoint, is that we would try to go back and digest the recommendations that you make and try to fill them out in the best way that we can and develop some appreciation for them on a committee level.

Mr. Boehlert, do you have any——

Mr. BOEHLERT. I'm just very impressed with all three of you as individuals and your commitment, but more than that with what your various organizations are doing and the way you've not only given us food for thought, you've given us a whole banquet to try to digest and I'm especially appreciative, Mr. Garneau, of some of your closing remarks.

Question, Marty, if I may, the grant you received, was that a matching grant or——

Ms. GRUER. From the—from UFAU?

Mr. BOEHLERT. Right.

Ms. GRUER. No, that wasn't. It was a 1-year grant for our program.

Mr. BOEHLERT. Would you recommend a matching grant program to try to stimulate some local activity to come up with some——

Ms. GRUER. I think it would be a very good idea, yes.

Mr. BOEHLERT. How about——

Mr. RINGLER. I'd like to comment on that. I think that matching grant programs are important because I think that, you know, I think we're sophisticated enough to realize that we're not going to

get total 100 percent support from the Federal Government or the State government or the city government for any program at this point in time, and it's important to show local commitment to programs and get other people involved, but I'd like to just point to one specific example as it applies to my organization and how we were successful at doing something like that. In 1981 we received a $15,000 grant from the U.S. Fire Administration to develop a computerized arson early warning system and I took that $15,000 and I leveraged it into $235,000 in both city, State, and private sector funds. At this point today our program is probably one of the most—probably one of the most well-funded anti-arson fire prevention programs of any community organization in the country and the reason being that we've been very successful at going out and leveraging those dollars. We've even begun to generate some of our own income from some of our activities that are going back into these type of programs, so it's obviously important. The point I'd like to make and I tried to make it in my presentation, is that it has to start somewhere. And one of the things I found: the importance of that initial $15,000. While it was a very small amount of money relative to other things, it was critical in terms of our effort in being able to go out and develop the credibility and say, look, you know, the U.S. Fire Administration is supporting these efforts, you know, it's a national organization that is involved in preventing fires and they are supporting these types of activities.

Many of the other funding sources that are out there do not have the slightest idea of what fire prevention is. I mean you talk to people and you get things like, I've talked to people at HUD where they say, well, we don't see where fire has anything to do with our programs, and I almost felt—I mean in a recent meeting that we had I almost fell off my chair and my response was you mean you can't see that fire is a housing problem. I mean, you know, it's very plain to people at the community level that that's a reality, so in terms of the sources of funds that are out, there there's really a lack of understanding about the fire issue and one of the things we've attempted to do over the years is to go out and educate people in the funding world as to, you know, what fire and arson prevention is all about. And one very good example of what came out of that effort was Ernie and I spent a lot of time working on the Ford Foundation and got them to commit more money than any other funding source has committed to community based arson fire prevention programs and it came to somewhere around $3 million, from which both of our organizations have gotten funds directly, Marty's organization has also gotten through one of the projects that they've set up. So, again, you know, the leveraging aspect of it is extremely important. We have to start somewhere.

Mr. BOEHLERT. What is the insurance industry doing? [Laughter.]

Mr. GARNEAU. I've got that one. I'll respond to that. If there was a—if I had a dollar for every time, given what we do, that someone asked me, well, the insurance industry must fund you, we would not need any Federal funds. There's a real problem with the insurance industry that's been documented in several studies that I'd be more than willing to share with this committee, that in fact most insurance companies in this country, most, not all, have gone out of the insurance business and as we say have gone into the Ameri-

can Express business. They are not particularly interested in insurance as a practice or as a service. They are interested in insurance as a vehicle to collect cash invested and spend it on the float. I mean if we ever really thought how did American Express make so much money if you get your bill in 30 days and you pay it, but they became a billion dollar company and that's the attitude of the insurance industry. Last week I testified at a State hearing in Massachusetts where we—when we talk about partnership I mean it's important to note that the fire service also needs training such as Fritz has gathered over the years in how to leverage dollars. I'm always amazed at how the fire service has not learned how to leverage dollars yet. But, at this hearing Representative Travis, who is one of the supporters of the bill set—questioned the insurance lobbyist against this bill and where we were asking for 125th of a penny of every dollar insurance premium to be dedicated to fire prevention for the fire service community organizations and other and the——

Mr. BOEHLERT. You're reading my notes.

Mr. GARNEAU [continuing]. And the line of questioning went like this, well, forget the funding aspect, would you—do you think this program will reduce fires? Most definitely, the insurance industry representative. Next question, well, if it reduced fires that would reduce the claims. Correct. Would that reduce the insurance premiums? Well, we're not sure. It would and anything that reduced the premium dollar as your risk of fire goes down—two main problems: as the risk of fire goes down you're going to pay less for insurance. I mean if I was to insure members of this committee against being hit by one of these meteorites on the wall and you were to give me a dollar you would be making a bad insurance investment. If there—the chance of fire is greater, then they can charge more, which means they can invest more, which means they generate more and that's—so in one report done by a professor at Harvard University he came out and flat out said that it's not in the best interest of the insurance industry to fund fire prevention. Now, I'm sure the insurance industry would have some comments on that, but we've done a recent survey of the insurance industry funding practices in this area and if someone can find, of the top 100 insurers, a company that has made more than a $5,000 grant over the last 5 years I'd like to know about it.

Ms. GRUER. I'd like to add a little bit to that statement. Through the Ford Grant that we received on the AIMS project, one of the parts of that is to involve the insurance industry in a way that we've never been able to involve them before. We have a representative meeting with us on a monthly basis. He's been able to understand that, yes, we can say a house is going to burn this weekend and we have very little we can do about it. He's very enthusiastic about the AIMS project and because of his enthusiasm and his help at this point, we're able to get a meeting next month with all the top representatives of the insurance companies in our area, but that was through forced effort practically, a partnership that's been funded by the Ford Foundation that we've helped maintain through use of our grant. It certainly hasn't come, you know, out of the goodness of their hearts and I think that's one thing where I was mentioning in my recommendation that there needs to be a

mandating of a national partnership of all the sectors that are involved in this because it's not going to be a voluntary thing.

Mr. GARNEAU. I would just like to follow up on that. I mean part of the reason we talk about budget and we've heard about budget, I mean the Fire Administration budget is nothing to write home about to begin with in our estimation. I mean the fact that the tire service in this country gets such a small amount and fire prevention, I mean it's just atrocious, but beyond that, I mean to put money into a budget is—what are we going to do with it, how are we going to increase prevention, and while the insurance industry has given very little to prevention I would suggest that as a nation we've given very little and when it becomes a priority of the Fire Administration that we're going to do prevention, we're going to get involved in structual prevention, structual prevention, then you're going to involve the insurance industry. They're going to get involved out of fear, love of goodwill, but I mean that's the key to it.

Mr. BOEHLERT. Well, I want to thank all three of you. You've given us an awful lot to chew on and I noticed the Chairman, too, was making some notes as you were testifying, and we both are sort of incredulous that HUD doesn't agree with your analysis of the situation, your collective analysis. We've got our job to do and there will be some follow through on our part. Thank you all very much.

Mr. RINGLER. Thank you.

Mr. WALGREN. Well that concludes our hearing then in this session and we do want to express our appreciation to you, each of you individually; you've made a real good contribution. Thank you.

[Whereupon, at 3:40 p.m., the subcommittee was adjourned.]

Washington Office

Headquarters Office
1501 Woodfield Road Suite 400 West
Schaumburg Illinois 60195 4980

Alliance of American Insurers
1629 K Street, Northwest, Suite 1010
Washington, D.C. 20006
202-822-8811

April 9, 1985

The Honorable Doug Walgren
Chairman

and

The Honorable Sherwood L. Boehlert
Ranking Minority Member
House Subcommittee on Science, Research & Technology
of the Science and Technology Committee
2319 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressmen Walgren and Boehlert:

The Alliance of American Insurers is a national trade association of more than 175 property and casualty insurance companies doing business in all fifty states and the District of Columbia.

We vigorously object to the testimony presented before your committee by Mr. William Ernest Garneau, Executive Director, Urban Educational Systems, Boston, Massachusetts, relating to what the insurance industry is doing in promoting fire prevention and control programs and also anti-arson programs. His remarks, in our opinion, make it appear as if the insurance industry has no interest and has done nothing in promoting fire control and prevention programs. We would, however, be the first to agree that much more needs to be done to curtail fires in this country. We view the "U.S. Fire Problem" as everyone's and not just the problem of the insurance industry.

As of early 1984, there were more than 5,500 insurance companies based in the United States and operating under the supervision of regulatory authorities in the various states. Some of these companies sell all lines of insurance but many just specialize in one or two lines of business. Some 3,474 of these companies sell some form of property and casualty insurance, however, a vast majority of the business is written by approximately 900 companies. The insurance industry is not a monolithic industry and therefore it is most difficult to compile a record of what has been done and what the industry is doing in the area of fire prevention and control.

The property and casualty insurance industry provides leadership in the nation's fight against arson. One important weapon in the battle is the arson-reporting immunity laws which now are in effect in all fifty states. These laws make it possible for insurers and law enforcement agencies to share information on possible arson cases by prohibiting defamation lawsuits.

The Insurance Committee for Arson Control, an organization representing 2,000 insurance companies writing 85% of the nation's property and casualty insurance, published a booklet, "Good Faith: An Insurers Approach To Suspicious Fire Claims," offering advice on what insurers can do when confronted with bad faith or punitive damage cases.

Another important tool for arson investigators is the Property Insurance Loss Register (PILR), administered by the American Insurance Association. Insurers representing 95% of the nation's fire insurance business have entered more than 1.5 million fire loss histories into the PILR computer system, with the information available to other insurers investigating claims -- and on occasion to law enforcement agencies.

More than 50 anti-arson and tip award programs are operating in communities across the country, many of them supported by the insurance business. The programs publicize telephone numbers to report arsonists and offer cash incentives.

The fact that the efforts have been worthwhile is reflected by a report from the National Fire Protection Association that property losses from fires of incendiary or suspicious origin dropped 11% from $1.8 billion in 1982 to $1.4 billion in 1983.

Senator Charles H. Percy during the second session of the 98th Congress praised the insurance industry for their efforts in combating arson. Mr. Percy told the Senate, "It has become almost an immediate reaction for us to turn to the government for solutions when we face a serious problem. I am pleased to report that one problem -- arson-for-profit -- is being combatted successfully by the insurance industry working hand in hand with law enforcement officials. The industry has taken the lead in mounting an attack on arson, a crime responsible for as many as 1,000 deaths and $6 billion in property damages each year. Clearly, their efforts are paying off. In the Chicago area, for example, arson losses are down nearly 50% over the past two years from $22 million in 1980 to $11 million in 1982."

The Senator also stated that "working through the National Committee on Property Insurance, the industry has developed special underwriting and claims procedures to address the particular problem encountered with respect to arson in high risk urban areas."

Senator Percy concluded his statement to the Senate by stating that, "the problem of arson continues to be a serious problem in many of our urban areas. However, we are now making great strides in combatting this problem because of the efforts of the insurance industry. I can think of no other example where industry has played such a critical role in reducing crime. I commend the insurance industry for this initiative in fighting arson."

If it were possible to compile a poll, we are certain many other members of the Congress and Federal agencies would testify to the tireless efforts and financial investment the insurance industry has made in helping to combat arson and the fire problem in this country.

It is noteworthy that through the efforts of the insurance industry and others arson was classified as a Part I crime under the Federal Bureau of Investigation's Uniform Crime Reports System on October 12, 1982. The industry has been in the thick of the fight to promote fire prevention and control programs in the United States.

We are submitting for your information numerous examples of documents and reports dealing with fire prevention and control programs produced largely through the efforts of the insurance industry.

If you have need of assistance or additional information on this grave problem please contact me.

Sincerely

James E. Jones, Jr.
Senior Washington Representative

Attachments

FIRE PREVENTION, CONTROL AND ANTI-ARSON PUBLICATIONS

Actual Cash Value Guidelines

Anti-Arson Action Plan

Anti-Arson Checklist

Anti-Arson Funding Guidelines

Arson A Burning Issue

Arson Current Shock

Arson Information Kit

Arson Resource Center Bulletin

Compendium Of Property Insurance Termination Laws For Fair Play States

Commercial Core -- Commercial Adjuster's Kit

Core -- Residential Adjuster's Kit

Crime Losses In Property Casualty Insurance

Current Arson Issues: A Position Paper

Good Faith -- An Insurer's Approach To Suspicious Fire Claims

Guidelines and Resources For Identifying And Avoiding The Arson-Prone Risk

Insurance Committee For Arson Control -- "A Continuing Commitment To Fight Arson In America"

Inventory Of Enacted State Arson Legislation

Is Arson Serious? -- You Be The Judge!

Just The Facts: Effective Claims Interviewing

Juvenile Firesetter Programs

Keeping The Heat On Arson

Property Liability Insurers Marshal Resources To Help Curb Alarming Increase In Arson Fires

Planning Fire Protection For Building Construction Projects

Resisting Arson Fraud

State-By-State Summary Of The Arson Reporting-Immunity Laws

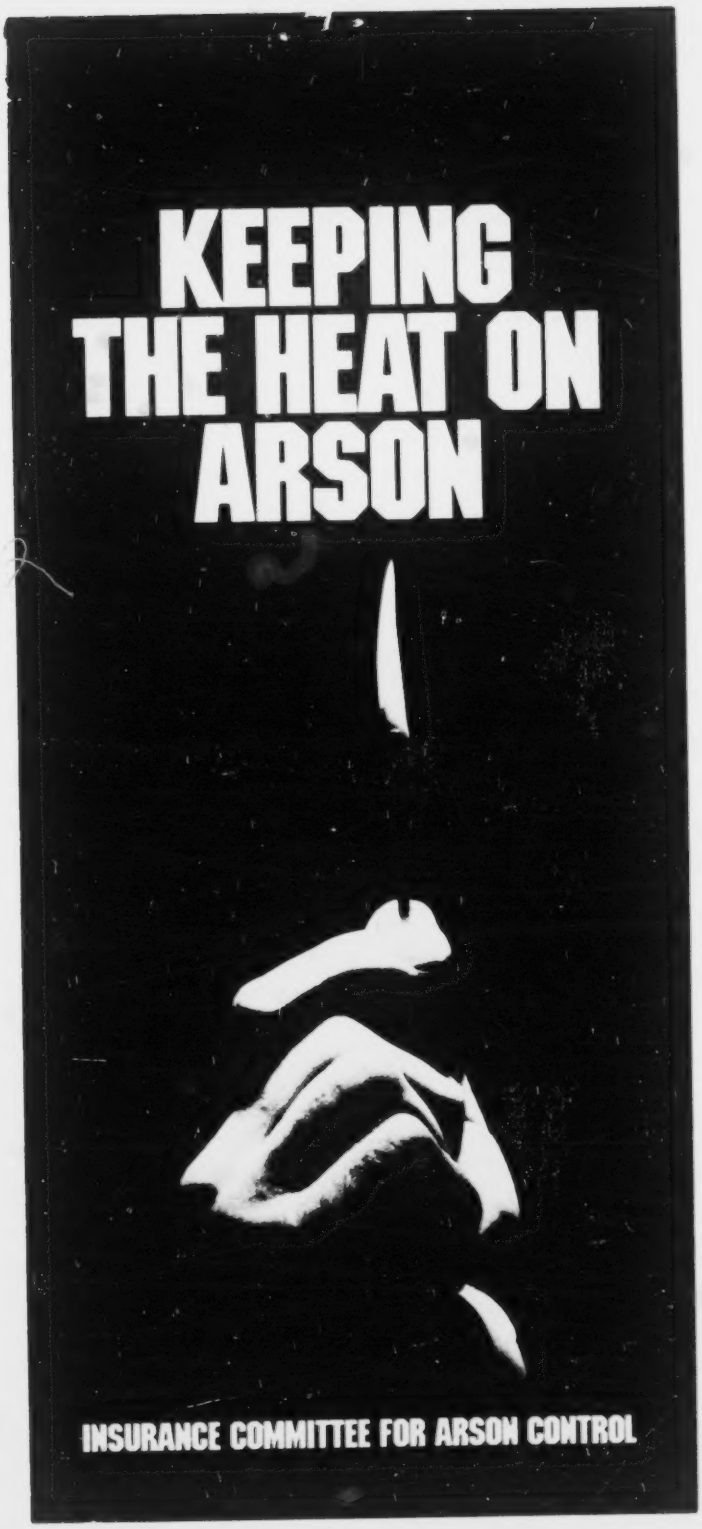
Status Report On Arson Reporting -- Immunity Legislation

Target Arson: Update: Sept., 1984; March, 1984; June, 1984; Sept., 1984; Dec., 1984 -- issues

There'll Always Be A Con Man -- Or Will There?

The ABC's Of Negotiating

The Adjuster's Search For Cause And Origin


KEEPING
THE HEAT ON
ARSON
INSURANCE COMMITTEE FOR ARSON CONTROL

One of ICAC's top priorities is to serve as a resource for insurance companies to draw upon for their independent anti-arson programs.

To that end, ICAC:

- conducts regional workshops for company personnel;
- provides guest speakers for industry meetings and training programs;
- helps analyze anti-arson grant requests directed to insurers;
- develops practical and timely resources, such as an anti-arson insurance application form and a checklist for underwriters;
- publishes handbooks and "how to" materials for insurance company use.

In the legislative arena, ICAC helps revise and enact laws aimed at improving the climate for effective arson control.

At the federal level, ICAC spearheaded a drive to make arson a permanent Part I crime on the FBI's Uniform Crime Reports, an objective that was realized with the passage of the Anti-Arson Act of 1982.

At the state level, ICAC worked with the National Association of Insurance Commissioners to develop a model immunity law, illustrating the language required to permit the free flow of investigative information between law enforcement officials and insurers. With ICAC's support, arson reporting-immunity laws have been enacted in 49 states.

ICAC and NAIC also developed a model anti-arson insurance application form for consideration by those states that require such applications. This model

enables underwriters to screen potential high risk properties.

ICAC also is working towards:

- strengthening the arson provisions of state penal codes;
- amending unfair claims settlement regulations and laws;
- shortening cancellation notification requirements where appropriate;
- repealing or amending valued policy laws.

The fight against arson requires strong public support and action in the community. Toward that end, ICAC works with the news media and other information outlets to speak for the insurance industry on arson related issues and to show what the industry is doing to combat arson. Working with the Insurance Information Institute, ICAC has made a significant contribution to the positive understanding of the insurance industry's continuing commitment to arson control.

PUBLIC INFORMATION PROJECTS

- Publications: ICAC produces literature containing background information and practical suggestions for arson control.
- Hotline: A national toll-free number (800-221-4954) offers arson related information.
- Arson Exhibit: The ICAC display provides anti-arson literature and information at key meetings.
- Public Service Announcements: ICAC-produced radio and TV messages bring the insurance industry's anti-arson message to audiences in the millions.
- Speeches – ICAC Committee members speak regularly at anti-arson meetings and conventions.
- Media Appearances: ICAC officials share their expertise on television and radio programs across the country.

ICAC serves as the insurance industry's liaison with all other organizations devoted to arson control, and often participates with them on joint projects.

For example, ICAC is working with the Ford Foundation and the National Fire Protection Association to develop standardized software which communities across the country can use to establish computerized arson information management systems (AIMS). These systems will identify properties having high potential for arson, thereby increasing the effectiveness of deterrent actions. This project utilizes the arson prevention skills and expertise of local fire departments, elected officials, insurance industry personnel and community leaders in a cooperative effort to prevent arson.

ICAC also is actively involved with:

- The National Association of Insurance Commissioners
- The Federal Bureau of Alcohol, Tobacco and Firearms
- The U.S. Fire Administration
- The International Association of Arson Investigators
- The National Committee on Property Insurance
- The All-Industry Research Advisory Council

ICAC's efforts to marshal public and private sector skills are paying off in better coordinated and increasingly effective attacks on arson.

Among the resources produced by the Insurance Committee for Arson Control are:

A 20-page booklet designed to help chief executive officers evaluate their company anti-arson efforts.

Insurance Committee for ARSON CONTROL

Let's keep it going.

The Insurance Committee for Arson Control (ICAC) was created in 1978 to supplement the anti-arson activities of property insurers and their trade associations by providing a mechanism for unified action and communication. Our activities with governmental and public groups have fostered effective anti-arson programs in many parts of the country. The benefits are measurable to both the communities and our companies.

The groundwork has been laid for reducing arson motivated by vandalism and revenge, as well as economic arson. How well we maintain these gains and make further progress depends on what we do as individual companies and through the ICAC. The next few years offer us an opportunity to benefit greatly from what has been started. Our industry has a key role to play in the development of effective, enduring programs across the country. Public and governmental groups working to reduce arson need and deserve our participation.

The ICAC has been effective because of the strong support it has received. This is reflected in the quality of the people its members send to serve on the committees. We look forward to your continued participation and to any suggestions on how ICAC can serve you more effectively.

Very truly yours,

Ralph J. Jackson

Ralph J. Jackson
Chairman

CURRENT ARSON ISSUES – A POSITION PAPER: A 50-page booklet describing the insurance industry's recommendations for effective legislative and regulatory measures to fight arson.

INSURANCE COMMITTEE FOR ARSON CONTROL: A CONTINUING COMMITMENT TO FIGHT ARSON IN AMERICA: A 12-page brochure which provides a detailed overview of the ICAC.

ARSON CONTROL DIRECTORY: A regularly updated, loose-leaf listing of state and local arson task forces.

GOOD FAITH – AN INSURER'S APPROACH TO SUSPICIOUS FIRE CLAIMS: A comprehensive review of punitive damages and bad faith awards as they relate to insurance contract claims.

OPTIONS FOR CLAIMS TRAINING: A nine-page booklet outlining training models for the detection, investigation and litigation of fraud arson claims.

ANTI-ARSON GUIDELINES FOR UNDERWRITERS: A comprehensive manual describing various underwriting considerations and how they can be used for effective anti-arson underwriting.

ANTI-ARSON CHECKLIST: A pocket-sized guide to the key indicators of potential fraud arson.

MODEL ANTI-ARSON APPLICATION: A brief description of the use and purpose of the two-tiered insurance application form.

ANTI-ARSON FUNDING GUIDELINES – A PRACTICAL APPROACH TO GRANT ANALYSIS: A manual designed to help insurance companies obtain the information necessary to analyze anti-arson grant requests.

STATUS REPORT ON ARSON REPORTING-IMMUNITY LEGISLATION: A four-page brochure covering the status and content of the arson reporting-immunity laws in each state.

TARGET ARSON: UPDATE: A quarterly newsletter which covers current arson related developments and activities throughout the U.S.

Copies of the ARSON CONTROL DIRECTORY are available for $25. All other publications are available at no charge from:

Insurance Committee for ARSON CONTROL
85 John Street, New York, N.Y. 10038
(212) 669-0522

Insurance Committee for ARSON CONTROL

85 John Street □ New York, New York 10038 □ 212•669•0522

Joyce V. Sauerteig
Executive Director

April 12, 1985

The Honorable Douglas Walgren
2241 Rayburn House Office Building
Washington, D.C. 20515

Dear Mr. Walgren,

I am writing to correct an impression concerning the insurance industry's fire prevention activities that may have been left on you by the remarks of W. Ernest Garneau before the House Subcommittee on Science, Research and Technology on March 21.

My particular concern is that Mr. Garneau's comments completely ignored the insurance industry's significant effort in recent years to develop the mechanisms which help control, and reduce, the crime of arson. That these efforts seem to be bearing fruit is reflected in the decline recorded in structural incendiary or suspicious fires from 160,000 in 1978 to 122,000 in 1983.

These efforts have been exerted by the insurance industry trade associations, insurance companies and agencies, and collectively through the Insurance Committee for Arson Control (ICAC). As the enclosed brochure indicates, the ICAC is involved with controlling arson and aiding fire prevention through its operational, legislative and public information programs. Coalition efforts at the local level, best exemplified by the ICAC sponsored arson information managements systems (AIMS) now being developed in selected cities, also demonstrate the insurance industry's commitment to arson control. The insurance industry has been instrumental in motivating the formation of literally hundreds of state and community anti-arson task forces, as the enclosed 1978 reprint indicates.

We are proud of the results achieved thus far and proud of the recognition of these efforts by those in a position to know. For example, then-Senator Charles Percy (whose Senate Permanent Subcommittee on Investigations staff five years previously had been critical of the insurance business) said in a floor speech last year:

> "I am pleased to report that one problem -- arson for profit -- is being combatted successfully by the insurance industry working hand-in-hand with law enforcement officials.
>
> I can think of no other example where industry has played such a crucial role in reducing crime. I commend the insurance industry for its initiative in fighting arson."

Similarly, in an extensive article in the August 1984 issue of The Police Chief which detailed many of the measures taken by the insurance industry, Phillip G. McGuire, Associate Director of the Bureau of Alcohol, Tobacco and Firearms, wrote:

> "In the legislature, at the crime scene, in the community and the courtroom, insurers have earned the right to be considered a major force on the anti-arson task force."

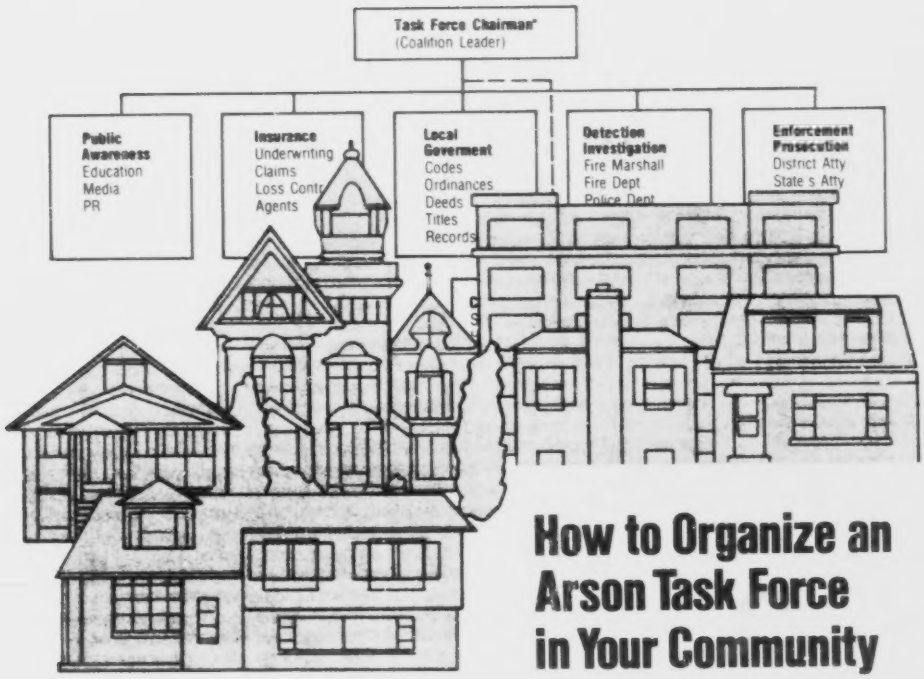
The Insurance Committee for Arson Control would be pleased to provide any additional information or to discuss these activities in any forum you think appropriate. We are confident that our efforts portray a far different environment of activity than the impression sketched at your March 21 hearing.

Very truly yours,

JVDoss Sauerteig

Joyce V. Doss Sauerteig
Executive Director

JVDS/jo
Enclosures



How to Organize an Arson Task Force in Your Community

Reprinted from JOURNAL OF AMERICAN INSURANCE

Volume 54, No. 3
20 North Wacker Drive
Chicago, Illinois 60606

For information contact:

INSURANCE COMMITTEE FOR ARSON CONTROL
85 John Street
New York, New York 10038
(212) 669-0522

How to Organize an Arson Task Force in Your Community

It's easier than you think—just a little cooperation and a lot of dedication.

Arson is a sneaky, cowardly crime.

Arson kills an estimated thousand people a year. Thousands more are injured. Dollar losses, both direct and indirect, are believed to be in the billions.

Concerned citizens *can* do something about it. Individuals and groups at the local level can cooperate in the formation of arson control task force organizations. These task forces are action coalitions of representatives from both the public and private sectors. They are springing up in many parts of the country. The time for them is both urgent and propitious.

Urgent, because arson is spreading. Arson frequently is called America's fastest growing crime.

Propitious, because both government and industry are taking important steps to help achieve more effective arson detection and control.

In November, President Carter signed legislation elevating arson to a Part I crime in the Uniform Crime Reports of the Federal Bureau of Investigation. This significant step must be extended by further legislation in 1979, a provision of the present law which expires September 30, 1979. But the result of reporting arson as a Part I crime over the long term can be more and better information about arson which presently is lacking. Information of better quality and greater quantity is essential to development of more appropriate countermeasures.

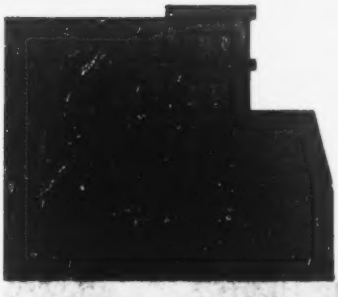
The property-liability insurance industry has been fighting arson for many years, often with the help of organizations and people at the local level. In September the industry gave birth to a new and major program for greater cooperation among public officials and private citizens and their organizations in the fight against arson (see box on page 2).

Most communities now have the capability to begin development of their own programs to stop the growth of arson. Usually the only thing lacking to get them going is a catalyst—a person or group with sufficient interest and leadership ability, or a series of crisis events precipitating attention and public demand for action. Seattle and Houston, for example, have already undertaken successful programs. San Francisco's new special arson task force for the Bay Area combines federal and municipal representatives and includes the cooperation of the insurance industry.

What are the guidelines for establishing a local area task force to control arson?

Since communities are unique, no hard and fast rule fits all of them. But there are broad principles and suggestions which serve this purpose, as the accompanying chart indicates.

Any group of concerned citizens, business organizations, or civic groups, however small, can start things going. Upon identifying this initial interest and motivation, however, it is important to pause long enough to sketch a preliminary plan, even though it will probably be modified as the movement grows. Planning at this point is the most vital ingredient.



Guidelines for Establishing an Arson Task Force

The property-liability insurance industry is undertaking a major program to encourage cooperation within both the public and private sectors to curb the growing crime of arson. The plan seeks to marshal more effectively the arson fighting resources of business and government and includes encouragement of the formation of local community arson control task forces.

This new all-industry Insurance Committee for Arson Control is made up of the national trade associations and companies from the property-liability insurance industry. Those desiring additional information about arson control and the formation of local task force groups, can send their inquiries to the Insurance Committee for Arson Control, 20 North Wacker Drive, Suite 2140, Chicago, Illinois 60606.

The Arson Task Force is an effective coalition mechanism whereby communities can organize and bring about cooperation among the disciplines and resources necessary to stop arson. Each community, of course, should develop its task force in the way which will most responsively meet its specific needs. However, here are components for a task force suggested by the Alliance of American Insurers and the Property Loss Research Bureau:

*Task Force Chairman—The chairman of the Task Force must be a strong coalition leader. He is the catalyst for getting the program organized, obtaining commitments of cooperation, and generating enthusiasm and momentum for implementation on a continuing basis. The person who would be chairman may vary from community to community. A person of probable high visibility and broad respect, the chairman in one community might be the mayor or an outstanding business leader.

In other places the chairman may be the district attorney, the police chief, the fire chief or some other professional. In Seattle, for example, the successful task force effort was headed by Fire Chief Keith Hanson. It is well to remember that a coalition such as an Arson Task Force must involve individuals who have major public responsibilities that overlap to some degree. The challenge for a chairman is to bridge such potential differences, help resolve jurisdictional considerations, and generate a strong spirit of cooperation to achieve common goals.

The outline chart, along with the help of local directories and personal knowledge, can be used to match up the elements of the chart with the names of possible people, organizations and interest groups within the community which fit the different categories of the outline. At this point, formal invitations to join the activity should not be made, although task force organizers will probably have personal contact with some of these individuals.

In a separate listing, include those individuals within the community who are prominent, widely known and respected, and who are recognized as having leadership capability sufficiently strong to function as a chairman or catalyst to stimulate coalition effort in a common cause. Perhaps the mayor, a newspaper publisher or some business personality fits this role.

Finally, a tentative timetable should be added to the plan: a time frame for contacting these people and groups; a target date for the initial coalition organization meeting; target dates for the formation of committees and development of their recommendations in their interest areas; and, target dates for subsequent coalition meetings to approve recommendations and begin implementation of the recommended action programs.

If at all possible in contacting prospective participants, someone known to the prospect should make the contact, or someone from a position of mutual interest or other relationship.

In the planning and development of the local task force, organizers should always keep in mind the basic purpose of the coalition:

(1) Public education that arson is a serious problem but something can be done about it and local groups are taking action; (2) making it known that insurers are no easy touch in arson fraud; (3) that local government is cooperating, including assistance in researching property transfers and related records to uncover potential fraud evidence; (4) that the detection and investigation resources of the State Fire Marshal, the police department, the fire department and the insurance industry are being more sharply focused on arson; (5) that enforcement and prosecution efforts are being stepped up with the prosecuting attorney responsible for coordination in specific cases to improve the prospects for conviction of offenders; and (6) that close working liaison is being maintained with other federal, state and local agencies, plus business and all concerned with control of arson.

A coalition such as an arson control task force must involve individuals who have major public responsibilities that overlap to some degree. The challenge is to bridge such potential differences, help resolve jurisdictional sensitivities, and generate a strong spirit of cooperation for the achievement of the common goal.

If the task force is a team with the chairman as catalyst or coach, the district attorney can be viewed as the quarterback, the one to give the signals for strategic plays of investigation and the gathering of evidence that will score in conviction. The district attorney should work closely with investigators from the fire and police departments, representatives from the state fire marshal's office and insurance company representatives. The advantage to this is that investigators can get answers to their questions about proper evidence as well as the appropriate legal advice in search and seizure and investigative procedures. At the same time, the district attorney's office becomes more familiar with the case being involved from the start.

The task force should be staffed with police and fire arson investigators experienced in the areas of fire science, criminal investigation, criminal law and evidence. Often, it's better for police investigators to be assigned to the arson squad of the fire department.

Insurance representatives can complement the work of local authorities, providing evidence that might be needed such as proof of loss, examination under oath, inventories and ownership plus other relevant information.

State fire marshals usually have the power to issue subpoenas for books, records and witnesses. The state fire marshal's office also usually has the power to hold investigative hearings.

No task force can succeed without the strong support and cooperation of local government and its leadership, including the city council and key departments. In addition to the fire and police departments, these would include those responsible for inspection and enforcement of building codes and ordinances, as well as those maintaining records of property ownership and transfer.

The local arson control task force should not overlook the possibilities of a reward program for information tips leading to the arrest and conviction of arsonists. The source for the money to fund a tip award program should be broadly based, not imposed upon a single industry or community segment. Arson is not merely an insurance problem; it affects all within a community, both economically and socially. Apart from the direct costs of loss of life, injury and the destruction of property, the crime of arson has a long fallout of indirect costs. This includes deterioration of neighborhoods, erosion of the tax base, loss of employment if the target structure is a commercial enterprise, and similar ripple effect consequences.

Concerned citizens can have constructive influence upon their common destiny. The local arson control task force can be organized, can function effectively as a cooperative coalition of responsible people within both the public and private sectors, and can achieve its purpose. The key is to begin. ■

City of Canandaigua
Fire Bureau
13 Niagara Street · Canandaigua, New York 14424

James E. Farrell — Chief
(716) 394-2111

April 8, 1985

Carrye Brown, Counsel
House Science & Technology Committee
2321 Rayburn House Office Building
Washington, D.C. 20515

Dear Carrye:

I recently had the opportunity to attend the National Fire Academy, located in Emmittsburg, Maryland. The course I received instruction in was the Fire Prevention Specialist I course, an intensive study of the application of fire prevention codes.

This course was instructed by two very dedicated, very knowledgeable instructors, and was not an easy course to complete. The final exam was so thorough that I used eight hours outside of class to complete the open book test. I am certain that I learned techniques and research methods far superior to any that I had previously taken, including that required for my A.A.S degree in Fire Protection Technology, code enforcement classes and schools conducted by New York State and training seminars provided by the Finger Lakes Building Officials Conference.

During my stay at the National Fire Academy, it was brought to my attention that the possibility exists that the present stipend allocations will be done away with in the upcoming budget. Many of the members of my class, including myself, came from small departments and/or volunteer fire departments. When returning home and contacting my Fire Chief, I learned that my city would not have been able to send me to this valuable school had the Federal Government not provided the stipend for travel both ways, cost of housing and tuition, plus pay a portion of the cost of subsistence. In other words, if the present stipend and other funding is done away with, the Fire Academy will become a place where only members of large, urban departments will be able to attend, leaving those of us in smaller fire departments unable to take advantage of this excellent educational opportunity.

Please take into consideration the residents of the areas protected by the smaller departments needing equally educated fire fighters, code enforcement officers and fire safety educators when determining the areas that funding may be reduced within our Federal Government.

Respectfully,

Robert T. Case

Robert T. Case
Fire Inspector

enc.

S.N.F.A.I.I.
SOCIETY OF NATIONAL FIRE ACADEMY INSTRUCTORS, INC.
1213 LORENE DRIVE PASADENA, MARYLAND 21122
301-437-1990

March 24, 1985

Ms. Carrye Brown, Counsel
House Science and Technology Committee
2321 Rayburn H.O.B.
Washington, D.C. 20515

Re: National Fire Academy

Dear Ms. Brown:

Please enter the following into the Committee Official Record as our reaction to the proposed National Fire Academy stipend elimination.

The OMB has recommended the elimination of the student stipends, $1.417 million, that provides the funding for travel by American fire service personnel to the Emmitsburg campus. The result of the loss of these funds will be catastrophic to the medium and small fire departments in this country. These sized fire departments have always had difficulty finding money to send their personnel to education and training courses. The loss of the stipend program will end their participation at this great educational facility.

The courses taught at the National Fire Academy are having a more positive effect on the citizens of this country than anything that has been accomplished by the American fire service in it's 200 year history. The students are returning home and implementing into their management operations the most up-to-date theories and practices. This includes all facets of emergency and non-emergency operations and systems.

If the stipend program is lost, the citizens of this country, from farm to major city, will be the real losers. The citizens of this nation can not continue to suffer the death, disfigurement, injuries, and dollar loss caused by rampant, out-of-control fire. We ask that you remember that we, the fire fighters, are the people who are running into the buildings from which the rest of you are running away. We need the most up-to-date training, systems, and management techniques that are available to survive in today's fire environment. The National Fire Academy is addressing that need in a most spectacular way.

Sincerely,

Burton W. Phelps

Burton W. Phelps
President

U S CONSUMER PRODUCT SAFETY COMMISSION

WASHINGTON, D C 20207

April 2, 1985

The Honorable Douglas Walgren
Chairman
Subcommittee on Science, Research and Technology
Committee on Science and Technology
U. S. House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

In response to your telephone inquiry to our Office of Congressional Relations, regarding the Consumer Product Safety Commission's reliance on the Center for Fire Research at the National Bureau of Standards (NBS), I am pleased to provide the following information.

Section 29(d) of the Consumer Product Safety Act states: "The Commission shall, to the maximum extent practicable, utilize the resources and facilities of the National Bureau of Standards, on a reimbursable basis, to perform research and analyses related to risks of injury associated with consumer products (including fire and risks from flammable fabrics), to develop test methods, to conduct studies and investigations, and to provide technical advice and assistance in connection with functions of the Commission."

The Commission has worked productively with the Center for Fire Research (CFR) since CPSC was activated in 1973. The areas of cooperation over the years are: Toxicity of Combustion Products, Upholstered Furniture Flammability, Fire Growth Research, Heating Equipment and the Cigarette Safety Act of 1984. The CFR has also advised the Commission on smoke detectors, smoke masks, mattress and apparel flammability, and fire data analyses. This relationship has been both productive and beneficial.

I hope this information is helpful. Please let me know if you have any further questions.

Sincerely,

Terrence Scanlon

Terrence Scanlon
Chairman

WPI Center for Firesafety Studies

March 28, 1985
File: GC

Congressman Doug Walgren, Chairman
Subcommittee on Science, Research
and Technology
Committee on Science and Technology
U.S. House of Representatives
Washington D.C. 20515

Dear Congressman Walgren:

I was delighted to learn that you invited Mr. Samuel Catanzano, Jr., P.E. of Pittsburgh, to appear at your authorization hearings on the fiscal 1986 budget for the Federal Fire Prevention and Control Act of 1974. As primary "users" of fire research results, the fire protection engineers of our country have not, in my opinion, had strong enough input to federal policy decision-making such as that considered at your hearing. You are certainly to be commended for seeking out the advice of this important segment of the fire community.

I have read the prepared testimony that Sam Catanzano planned to present at the authorization hearing, in behalf of the Society of Fire Protection Engineers. I am writing to you as the Director of the major U.S. graduate program in fire protection engineering to indicate that I support SFPE comments and to add several observations of my own.

I served as the Deputy Administrator of the United States Fire Administration at its inception in 1975 and through two years of the Carter administration. During that time, I had a good working familiarity with the Fire Prevention and Control Act of 1974 and some of the issues which needed consideration in its implementation. Because of my fire protection engineering background, I always had a strong interest in a viable fire research program.

The current decade could reveal itself to be a renaissance period in fire protection engineering. Papers given at symposia and professional meetings are taking on a much more quantitative tone than ever before. And, most importantly, building owners and developers who must pay the bills for fire safety are starting to realize the benefits they can achieve by using research results and modern engineering methods.

It is my understanding that the Reagan administration has eliminated $5.1 million from the National Bureau of Standards budget and that the Center for Research will be eliminated. The Administration states "this research is more properly the role of the private sector and state and local governments".

I must say that I simply find the idea of closing down the Center for Fire Research incomprehensible. This is truly an era when research results are starting to find their way to the marketplace. As a discipline, fire protection engineering is turning the corner; graduate programs like ours are sorely in need of new research results and research support to help keep the momentum going. Academia has a vital role to play in research, training practitioners, and transferring modern technology.

The Center for Fire Research is a focal point for the nation's research related to fire. It maintains a viable relationship with business, industry, research institutions, and academia. If this function is "more properly the role of the private sector and state and local governments", I would be interested to know exactly which private sector corporations, which states and which local governments have either the funds or the willingness to take on this important national function.

Our school will be heavily dependent upon the activities of the Center for Fire Research. I would urge you to do all you can to provide a healthy authorization for FY 1986. If you need any further information from me, or if I can be of any additional help, please call upon me at any time.

Very truly yours,

David A. Lucht
Director

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cc: Congressman Joseph Early